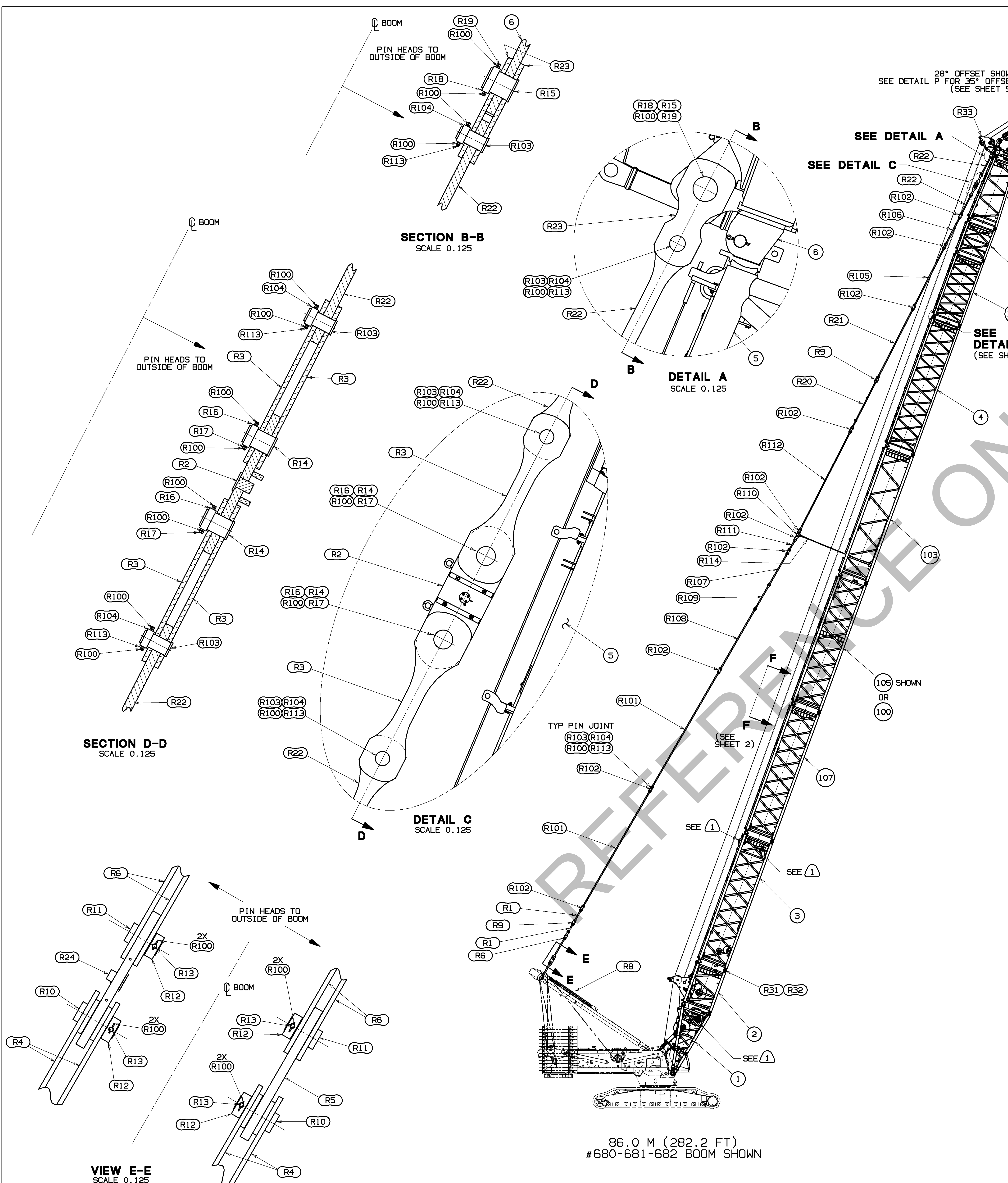
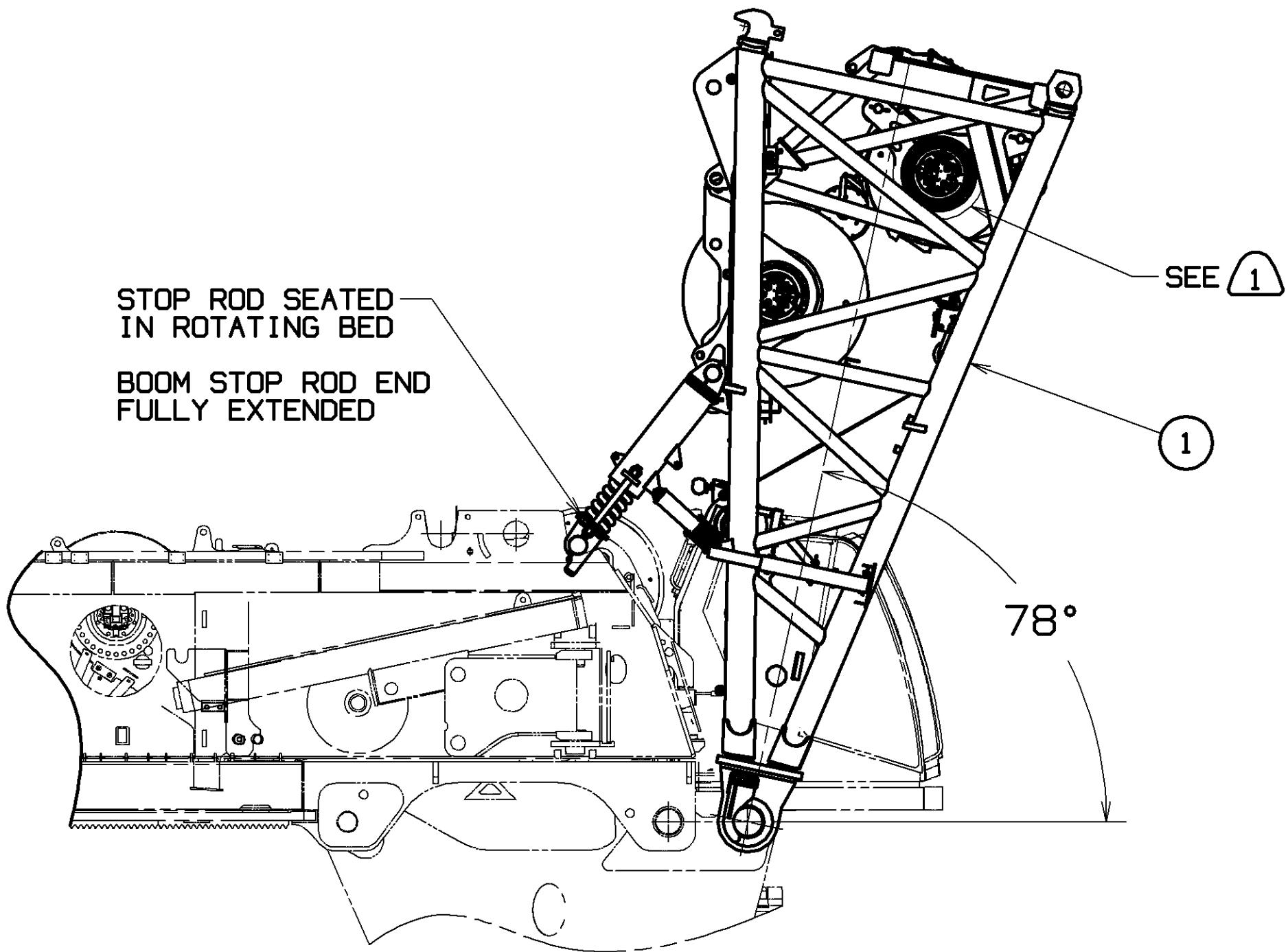
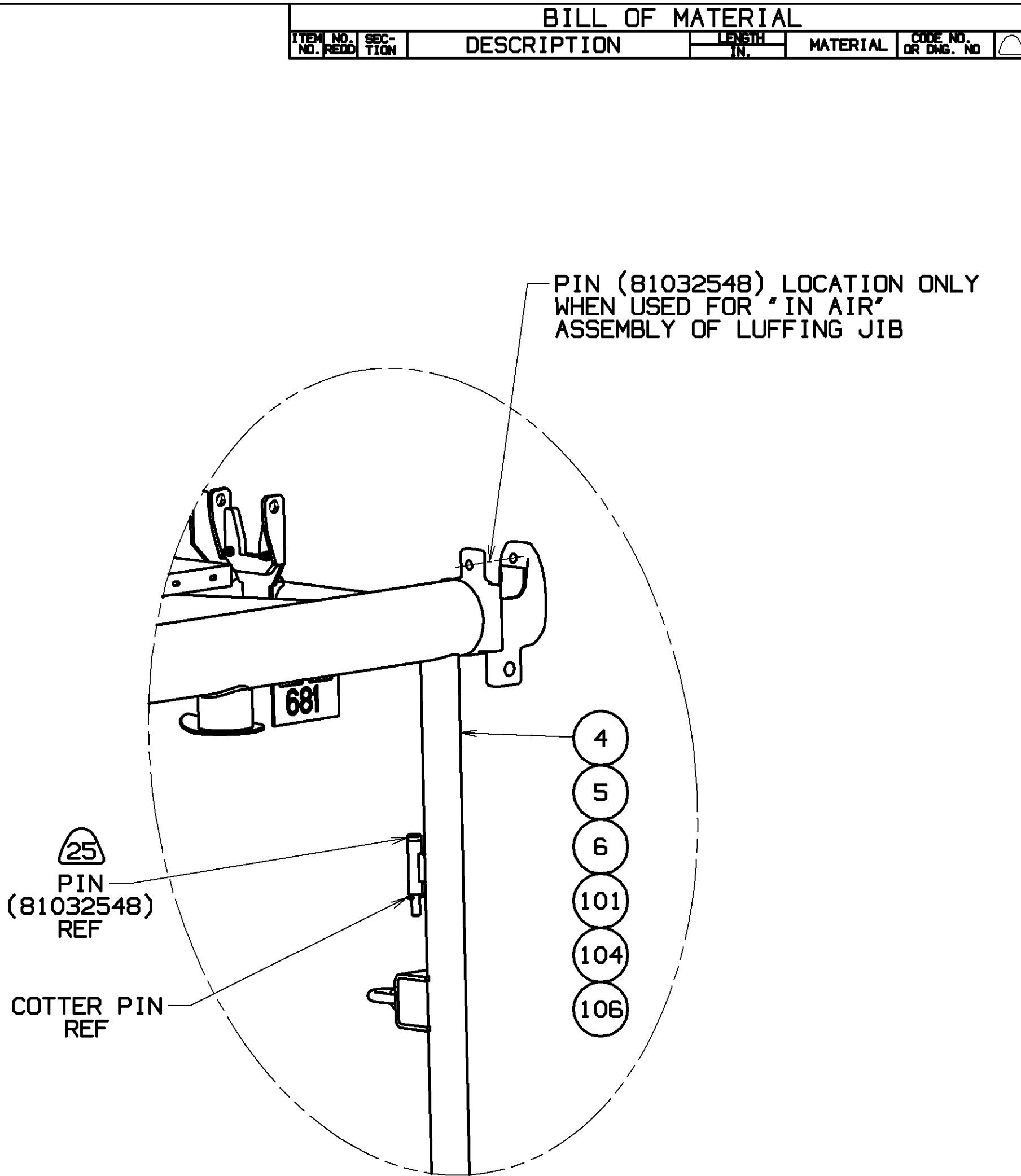




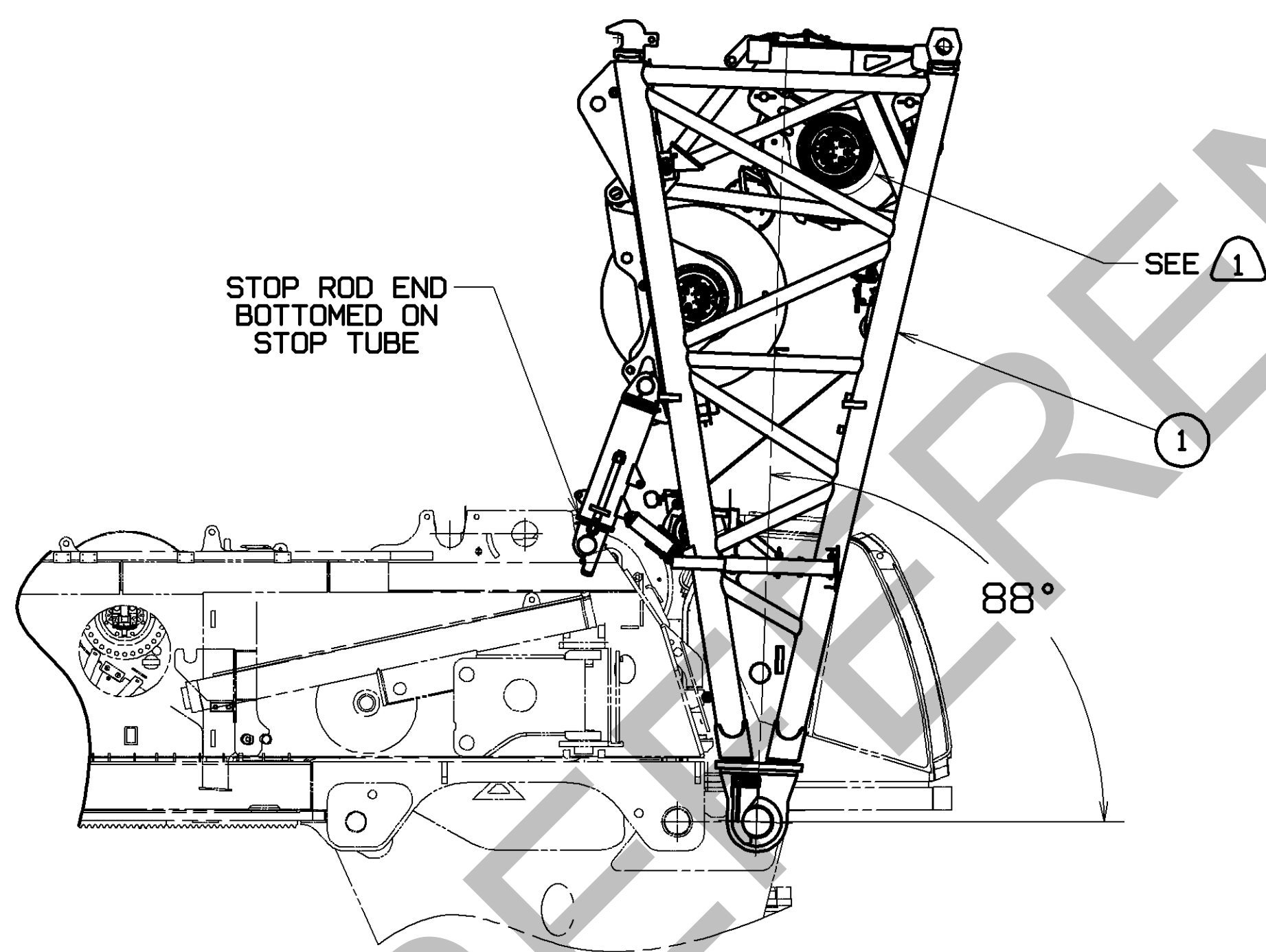
- 28° OFFSET SHOWN
SEE DETAIL P FOR 35° OFFSET
(SEE SHEET 9)
- SEE DETAIL A
- SEE DETAIL C
- SEE DETAIL DD
(SEE SHEET 2)
- 1 REQ'D FOR LUFFING JIB.
LUFFING JIB WIRE ROPE GUIDES ON 12M XH INSERT
MAY REMAIN IN PLACE WITH BOOM ONLY MAKEUP.
LUFFING DRUM IN BOOM BUTT MAY REMAIN IN PLACE
WITH BOOM ONLY MAKEUP.
ITEMS MAY BE IN OPERATING OR SHIPPING POSITION.
- 2 BUTT 6.00M I.D. TAG #81020304
- 3 INSERT 4.00M X-HEAVY I.D. TAG #81020307.
SEE DELTA NOTE 32.
- 4 INSERT 12.00M X-HEAVY W/SHEAVES I.D. TAG #81021997
- 5 INSERT 12.00M I.D. TAG #81021311.
SEE DELTA NOTE 32.
- 6 INSERT TRANSITION 6.00M I.D. TAG #81021715.
SEE DELTA NOTE 32.
- 7 TOP 1 METER CAP I.D. TAG #81026275.
SEE DELTA NOTE 32.
- 8 INSERT 12.00M HEAVY I.D. TAG #81020425.
SEE DELTA NOTE 32.
- 9 INSERT 6.00M I.D. TAG #81021205.
SEE DELTA NOTE 32.
- 10 INSERT 12.00M MEDIUM I.D. TAG #81021300.
SEE DELTA NOTE 32.
- 11 INSERT 12.00M MEDIUM W/SUSPENSION I.D. TAG #81035137.
SEE DELTA NOTE 32.
- 12 INSERT 3.00M I.D. TAG #81022005.
SEE DELTA NOTE 32.
- 13 INSERT 12.00M HEAVY W/EQUALIZER I.D. TAG #81022605.
SEE DELTA NOTE 32.
- 14 BOOM LENGTHS 83.0M (272.3 FT) THRU 110.0M (360.9 FT)
REQUIRES INTERMEDIATE SUSPENSION ITEM R114.
ITEM R114 IS OPTION 3 IN ITEM 103. 81035136
REFER TO BOOM LENGTH TABLE (SHEET 2) FOR SUSPENSION
PENDANT BUTTON NUMBER.
SEE SHEET 11 FOR OPERATIONAL INSTRUCTIONS.
- 15 STOWS IN STORAGE BOX 81028467.
- 16 REFER TO CAPACITY CHART IF JIB BACKSTAY STRAPS,
LINKS AND RETAINING HARDWARE REMAIN ON BOOM ASSY.
(SEE VIEW F-F ON SHEET 2)
- 17 INSERT 12.00M I.D. TAG #81034543.
SEE DELTA NOTE 32.
- 18 INSERT 12.00M X-HEAVY I.D. TAG #81034978.
SEE DELTA NOTE 32.
- 19 MAY BE USED AT 2 SHEAVE LOWER BOOM POINT
ON ITEM 6 TOP ASSY 81026272.
- 20 POINT EXT UPPER I.D. TAG #81009979
- 21 MAXIMUM NUMBER OF 12.00M INSERTS W/EQUALIZER = 1
- 22 FOR BOOM STRAP COMPONENTS ON OPTIONAL INSERT
REFER TO BOOM LENGTH TABLE ON SHEET 2.
- 23 SEE SHEET 3 DETAIL G AND SHEET 4 DETAIL L
FOR LIVE MAST ADJUSTMENT HOLE CONFIGURATION.
- 24 FOR ASSEMBLY AND RIGGING PURPOSE ONLY.
STOWS ON 4M INSERT 81020306.
SEE DETAIL R ON SHEET 7.
- 25 PIN 81032548 AS SHOWN IN DETAIL DD ON SHEET 2
NOT REQUIRED FOR BOOM.
ONLY USED FOR "IN AIR" ASSEMBLY OF LUFFING JIB
INSERTS #681 & #682.
- 26 CALLED FOR ON TOP ASSY ITEM 6 AS OPTION 1 EQUIPPED.
FOR SHEAVE CONFIGURATION REFER TO SHEET 9.
- 27
- 28 REFER TO SHEET 9 FOR COMPONENT CONFIGURATION.
STOWS IN PARTS BOX 81028467.
- 29 SEE BLOCK REEVING DRAWING 81042787 FOR RIGGING
CONFIGURATION OPTIONS AND INSTRUCTIONS.
SEE RIGGING WINCH ASSY 81026267 FOR BLOCK
AND WIRE ROPE ASSEMBLY.
- 30 RELOCATE FROM MAIN BOOM. (STOWS ON INSERT ITEM 3).
- 31 SUSPENSION PENDANT MAY APPEAR SLACK
DURING RAISING AND OPERATION.
CHECK SUSPENSION LOCATION AND PENDANT
BUTTON NUMBER AND CONTINUE OPERATION.
- 32 IF EQUIPPED WITH LOWER BOOM CONNECTOR PIN COMPONENTS USED WITH
HAND HELD CYLINDER (R204) 81030756, SEE DETAIL X ON SHEET 10.
IF EQUIPPED WITH MANUAL LOWER BOOM CONNECTOR PIN (R32),
SEE DETAIL HH ON SHEET 10.

BILL OF MATERIAL				ASSEMBLY	
QTY	ITEM NO	DESCRIPTION	UNIT	MATERIAL	NO
BOOM RIGGING B40:680-681-682					
1	1	BUTT ASSY #680, 6.0M		81020303	2
2	2	INSERT ASSY #680, 4.00M		81020306	3
3	3	INSERT ASSY #680, 12M W/SHV		81021996	4
4	4	INSERT #680/681, 12.00M		81021310	5
5	5	TRANSITION INSERT ASSY #681/682, 6M		81021714	6
6	6	TOP ASSY #682 1 METER CAP		81026272	7
7	7	POINT ASSY EXT. UPPER #58WA		81009978	20
8	8				
NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN THE BOOM LENGTH TABLE					
100	100	INSERT ASSY #680, 12.00M HEAVY		81020424	8
101	101	INSERT ASSY #681, 6M		81021204	9
102	102	INSERT ASSY #680, 12.00M MEDIUM		81021299	10
103	103	INSERT #680, 12.0M W/SUSP		81035136	11
104	104	INSERT ASSY #681, 3.00M		81022004	12
105	105	INSERT ASSY 680 12M HV W/EO		81022604	13
106	106	INSERT ASSY #681, 12M		81034541	17
107	107	INSERT ASSY #680, 12.00M X-HEAVY		81034977	18
108	108				
OPTION 1: HOOK BLOCKS					
200	1	BLOCK HOOK 135MT 32WR 3SH		81023461	19
201	1	BLOCK HOOK 100MT 28WR 3SH		81031987	19
202	1	WEIGHT BALL SWIVEL 22.2MT, 28MM & 32MM WR		81033344	19
203	1	HOOK BLOCK 160MT 3SH 32WR		84039500	19
204					
BASIC REFERENCE ITEMS					
R1	4	STRAP #680 BOOM 50.8 X 88.0		81022539	
R2	2	LINK ASSY LOAD		84047539	
R3	8	LINK #680 BOOM STRAP		81025610	
R4	4	LINK ASSY		81042456	
R5	1	LINK LIVE MAST		81026646	
R6	4	LINK LIVE MAST		81026647	23
R7					
R8	1	CYLINDER HYDR SELF ASSEMBLY		81027165	
R9	8	LINK #680, 4M INSERT		81027236	
R10	2	PIN 1 HOLE W/HD 105.7 DIA X 170.0 LG		81028072	
R11	2	PIN 1 HOLE W/HD 105.7 DIA X 120.0 LG		81028073	
R12	4	COLLAR 139.7 OD X 106.0 ID X 50.0 LG		81028074	
R13	4	PIN 2 HOLE 25.4 DIA X 157.0 LG		81028216	
R14	4	PIN 1 HOLE W/HD 105.0 DIA X 121.1 LG		81028258	
R15	2	PIN 1 HOLE W/HD 127.0 DIA X 121.1 LG		81028259	
R16	4	COLLAR 106.5 MM ID		81028260	
R17	4	PIN 2 HOLE 19.05 DIA X 142.0 LG		81028262	
R18	2	COLLAR 128.2 MM ID		81028264	
R19	2	PIN 2 HOLE 19.05 DIA X 167.8 LG		81028265	
R20	2	STRAP 12M #680/#681		81030485	
R21	2	STRAP 12M #680/#681		81030486	
R22	4	STRAP 6M #681/682 TRNSN		81030487	
R23	4	LINK #682 BOOM STRAP		81042554	
R24	1	LOAD CELL LINK 28M, 140 KGS		84038492	
R25	1	BOOM POINT LOWER ASSY 2 SHEAVES		81030118	26
R26					
R27					
R28	1	LINK ASSY DEAD END		81042356	28
R29	1	LOAD CELL LINK 25,000 KGS		81030836	28
R30	1	ESI POSITION LIGHT AND ANEMOMETER		81031642	30
R31	4	PIN SAFETY .250 DIA X 5.20 LG		81027802	
R32	2	PIN 2 HOLE 110.3 DIA X 242.9 LG		84036353	
R33	1	ROPE GUIDE #682 1 METER CAP		84046945	
NO. REQ'D FOR THE FOLLOWING REFERENCE ITEMS ARE IN THE BOOM LENGTH TABLE (SHEET 2)					
R100		PIN COTTER 1/4 DIA X 1.50 LG		562105	
R101		STRAP 12M #680, 681, 682		81020475	
R102		LINK #680 BOOM		81020476	
R103		PIN 1 HOLE W/HD 79.3 DIA X 121.1 LG		81020477	
R104		COLLAR 80.2MM I.D.		81020478	
R105		STRAP 6M #680		81021271	
R106		STRAP 3M #680		81022552	
R107		STRAP 12M #680 W/EQUALIZER		81027608	
R108		STRAP 12M #680 W/EQUALIZER		81027609	
R109		LINK #680 BOOM		81027655	
R110		LINK CONNECTING #680 12.00M W/STRUT		81028261	
R111		STRAP 12M #680 W/STRUT		81028322	
R112		STRAP 12M #680 W/STRUT		81028323	
R113		PIN 2 HOLE 19.05 DIA X 117.0 LG		A16804	
R114		SUSPENDER WIRE ROPE #680		81036355	14
R115					
REFERENCE ITEMS FOR ASSEMBLY AND RIGGING PURPOSE ONLY					
R200	2	SHACKLE BOW TYPE SAFETY PIN - 55 M TON		81007187	15
R201	2	SHACKLE 17MTON		81024427	15
R202	4	SHACKLE 40MT ALLOY		81030038	15
R203	2	PIN PULLER BOOM BUTT CAGE WELD		81030540	15
R204	2	PIN PULLER ASSY HAND HELD		81030756	15
R205	2	SLING LIFTING 100,000 LBSX10.83 FT		81038731	15
R206	2	SLING LIFTING 1 LBSX40,000(LBS)X10.30(FT)		81038732	15
R207	1	SLING LIFTING 20,000 LBSX5.25 FT		81038797	15
R208	4	SLING LIFTING 25,000(LBS)X12.5(FT)		81040162	15
R209	4	BUSHING 100X53X75.8		81038828	24
R210					
R211					
REFERENCE OPTION 3: EUBP DEAD END					
R300	1	LINK ASSY DEAD END		81042356	28

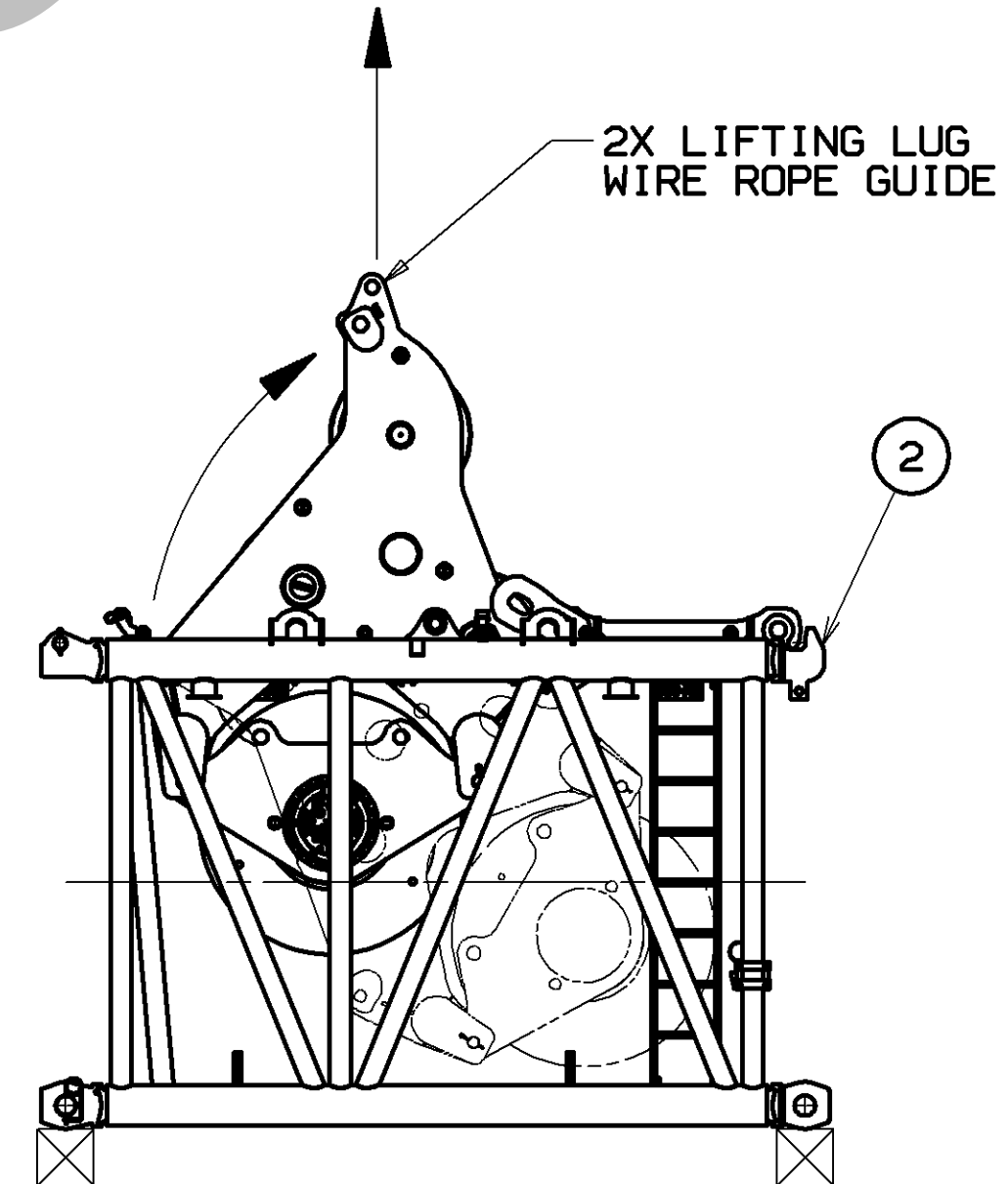
ITEMS REQ'D FOR VARIOUS BOOM LENGTHS - SEE SHEETS 3, 4, 5, & 6 FOR BOOM MAKE-UP																										
ITEM NO.		#680 INSERTS					#681 INSERTS			STRAP							LINK			PIN		COTTER	COLLAR	SUSPENSION		
		X-HEAVY	HEAVY		MEDIUM					R101	R105	R106	R107	R108	R111	R112	R102	R109	R110	R103	R113	R100	R104	R114 (31)	R6	
BOOM LENGTH		INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) EQ ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) BUSP ASSY	INSERT 6M (19.7FT) ASSY	INSERT 3M (9.8FT) ASSY	INSERT 12M (39.4FT) ASSY	STRAP 12M (39.4FT)	STRAP 6M (19.7FT)	STRAP 3M (9.8FT)	STRAP SHORT W/EQUAL	STRAP LONG W/EQUAL	STRAP SHORT W/SUSP	STRAP LONG W/SUSP	LINK	LINK W/EQUAL	LINK CONNECT W/SUSP	PIN	PIN	COTTER	COLLAR	PENDANT BUTTON NUMBER SEE (14)	LIVE MAST ADJUSTMENT HOLE SEE (23)	
METERS	FEET																									
44	144.4	0	0	0	0	0	0	1	0	2	0	2	0	0	0	0	16	0	0	32	32	84	32	-	A	
50	164.0	0	0	0	0	0	1	1	0	2	2	2	0	0	0	0	20	0	0	36	36	92	36	-	A	
56	183.7	0	0	1	0	0	0	1	0	2	0	2	2	2	0	0	20	4	0	40	40	100	40	-	A	
62	203.4	0	0	1	0	0	1	1	0	2	2	2	2	2	0	0	24	4	0	44	44	108	44	-	A	
68	223.1	1	0	1	0	0	0	1	0	4	0	2	2	2	0	0	24	4	0	44	44	108	44	-	A	
74	242.8	1	0	1	0	0	1	1	0	4	2	2	2	2	0	0	28	4	0	48	48	116	48	-	B	
77	252.6	1	0	1	0	0	0	0	0	4	0	0	2	2	0	0	32	4	2	52	52	124	52	-	B	
80	262.5	1	0	1	0	0	0	0	0	8	0	0	2	2	0	0	36	4	2	56	56	132	56	-	B	
83	272.3	1	0	1	0	0	1	0	0	8	2	0	2	2	0	0	36	4	2	56	56	132	56	5	B	
86	282.2	1	0	1	0	0	1	1	0	8	2	2	2	2	0	0	40	4	2	60	60	140	60	5	B	
89	292.0	1	0	1	0	0	0	0	0	8	0	0	2	2	0	0	36	4	2	56	56	132	56	4	B	
92	301.8	1	0	1	0	0	0	0	0	8	0	2	2	2	0	0	40	4	2	60	60	140	60	4	B	
95	311.7	1	0	1	0	0	1	0	0	8	2	0	2	2	0	0	40	4	2	60	60	140	60	4	B	
98	321.5	1	0	1	0	0	1	1	0	8	2	2	2	2	0	0	44	4	2	64	64	148	64	3	B	
101	331.4	1	0	1	0	0	0	0	1	8	0	0	2	2	0	0	40	4	2	60	60	140	60	3	B	
104	341.2	1	0	1	0	0	0	1	1	8	0	2	2	2	0	0	44	4	2	64	64	148	64	3	B	
107	351.0	1	0	1	0	0	1	0	1	8	2	0	2	2	0	0	44	4	2	64	64	148	64	3	B	
110	360.9	1	0	1	0	0	1	1	1	8	2	2	2	2	0	0	48	4	2	68	68	156	68	3	B	



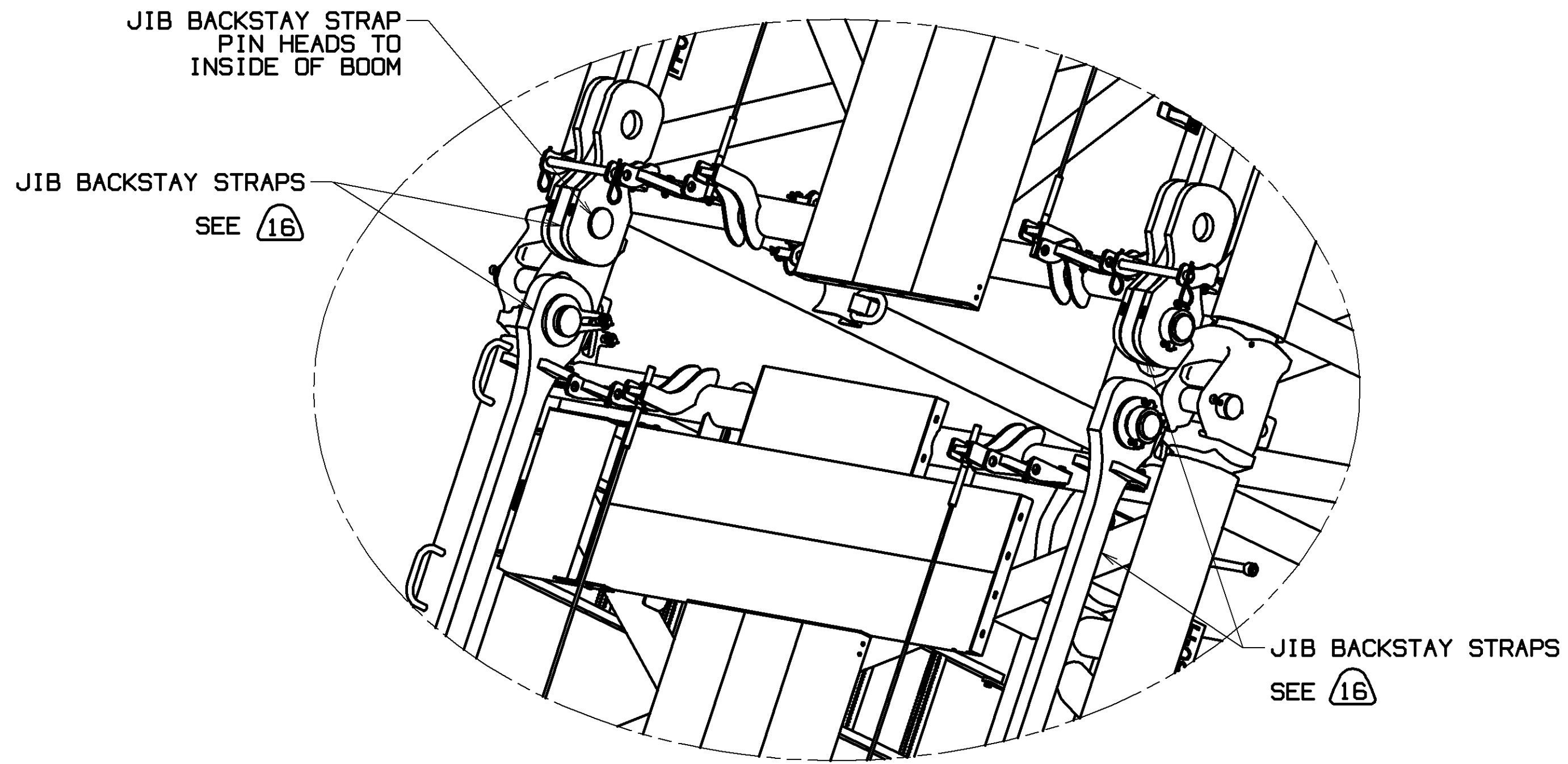
BOOM STOP
START OF CUSHION
SCALE 0.025



BOOM STOP
PHYSICAL STOP
SCALE 0.025

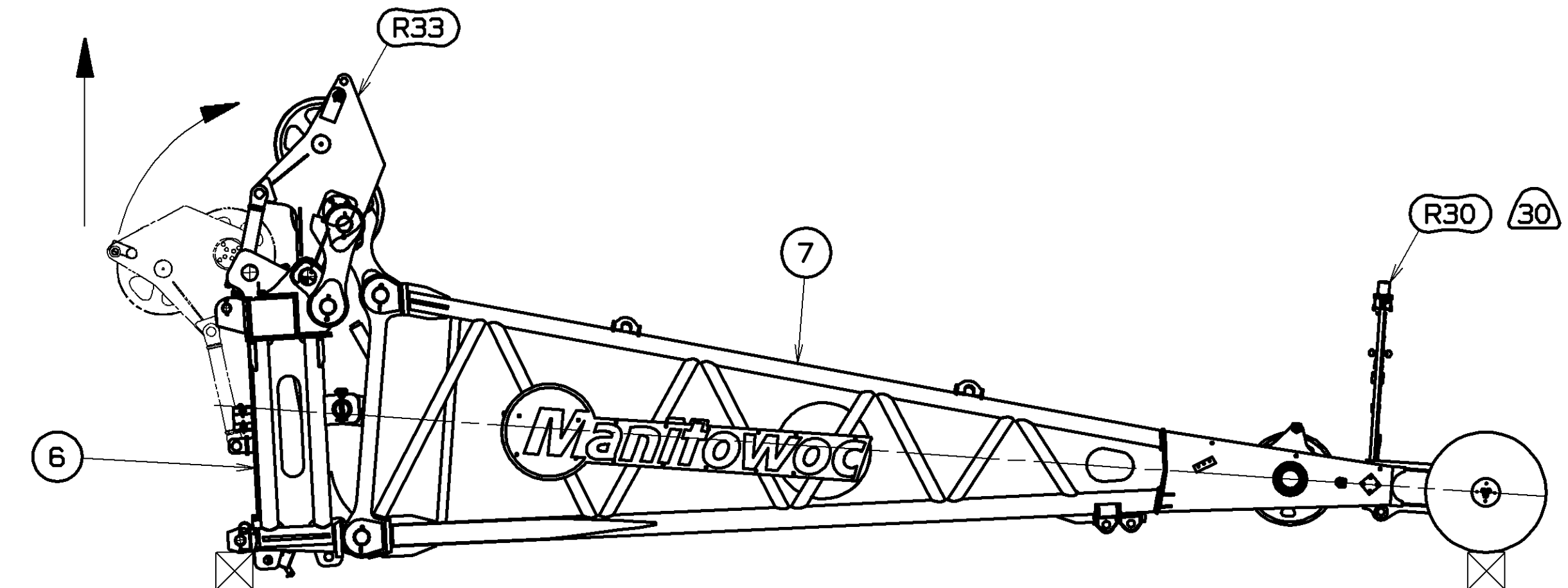


4M INSERT WIRE ROPE GUIDE ARRANGEMENT
SCALE 0.025



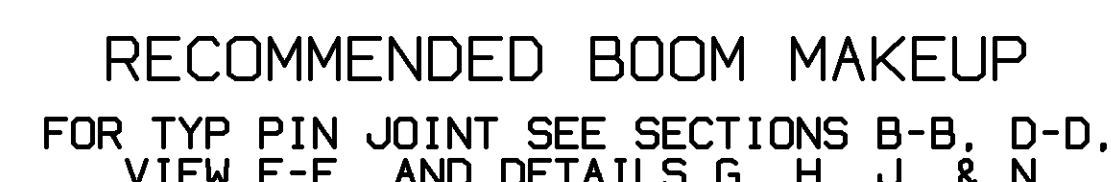
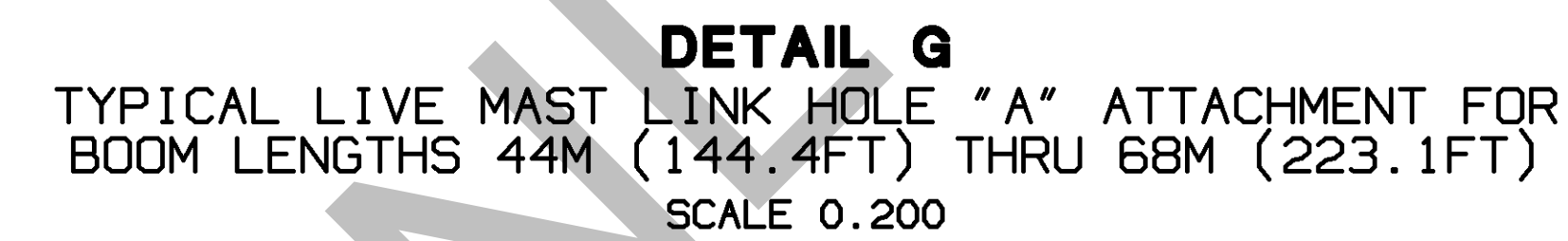
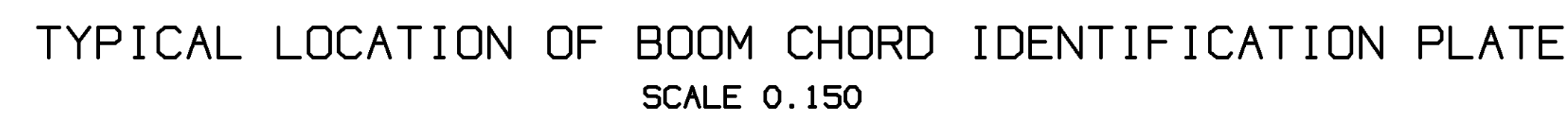
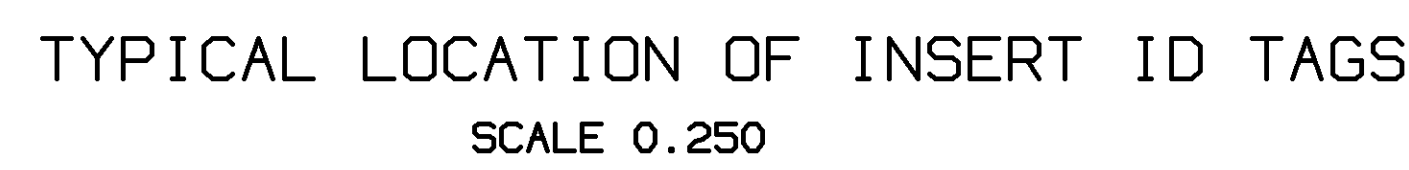
VIEW F-F
BOOM ASSY WITH BOOM STRAPS WORKING
AND JIB BACKSTAY STRAPS STOWED
(FROM SHEET 1)
SCALE 0.080

BOOM HANDLING WITH MAST WITH LIVE MAST STRAPS AND LIFTING SLINGS ATTACHED TO LUGS ON 4M INSERT: MAXIMUM BOOM INSERTS THAT CAN BE CANTILEVERED BEYOND 4M INSERT IS AS FOLLOWS						
LENGTH	12M(39.4FT) W/SHEAVES INSERT 81021996	12M(39.4FT) INSERT 81021310	12M(39.4FT) INSERT 81020424	12M(39.4FT) W/EQUALIZER INSERT 81022604	12M(39.4FT) INSERT 81034977	12M(39.4FT) INSERT W/SUSP 81035136
12M (39.4FT)	1	0	0	0	0	0
24M (78.7FT)	1	1	0	0	0	0
24M (78.7FT)	1	0	1	0	0	0
24M (78.7FT)	1	0	0	1	0	0
24M (78.7FT)	1	0	0	0	1	0
24M (78.7FT)	1	0	0	0	0	1



BOOM TOP 1 METER CAP WIRE ROPE GUIDE ARRANGEMENT
SCALE 0.025

TOLERANCE UNLESS OTHERWISE SPECIFIED		MACHINING		WELDING		APP TJA	
DECIMAL PLACES	FRACTIONS	± 10 FEET	± 10 FEET	± 10 FEET	± 10 FEET	± 10 FEET	± 10 FEET
(1) PLACE 0.0	± 0.06	± 0.06	± 0.06	± 0.06	± 0.06	± 0.06	± 0.06
(2) PLACE 0.00	± 0.006	± 0.006	± 0.006	± 0.006	± 0.006	± 0.006	± 0.006
(3) PLACE 0.000	± 0.0006	± 0.0006	± 0.0006	± 0.0006	± 0.0006	± 0.0006	± 0.0006

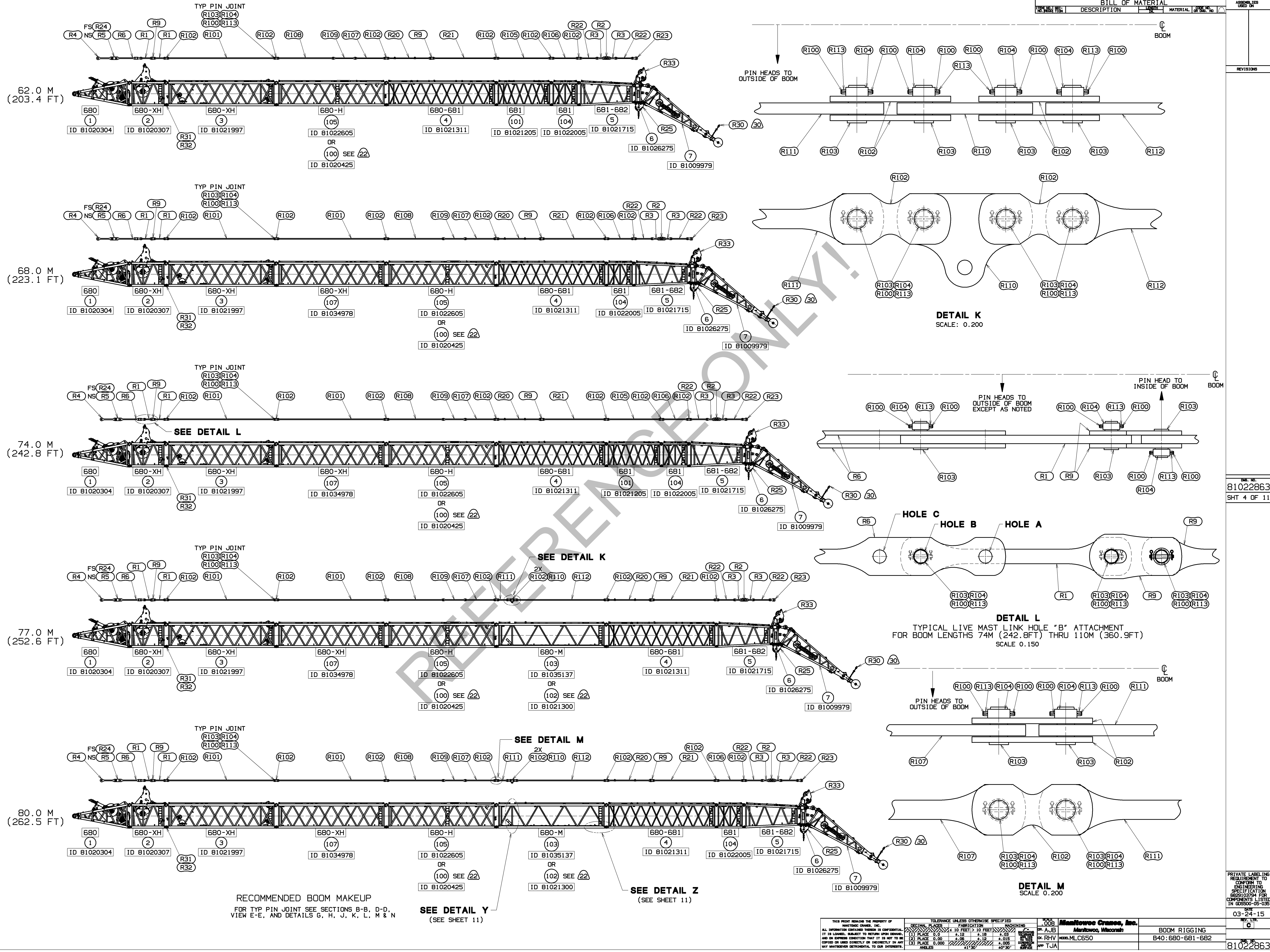


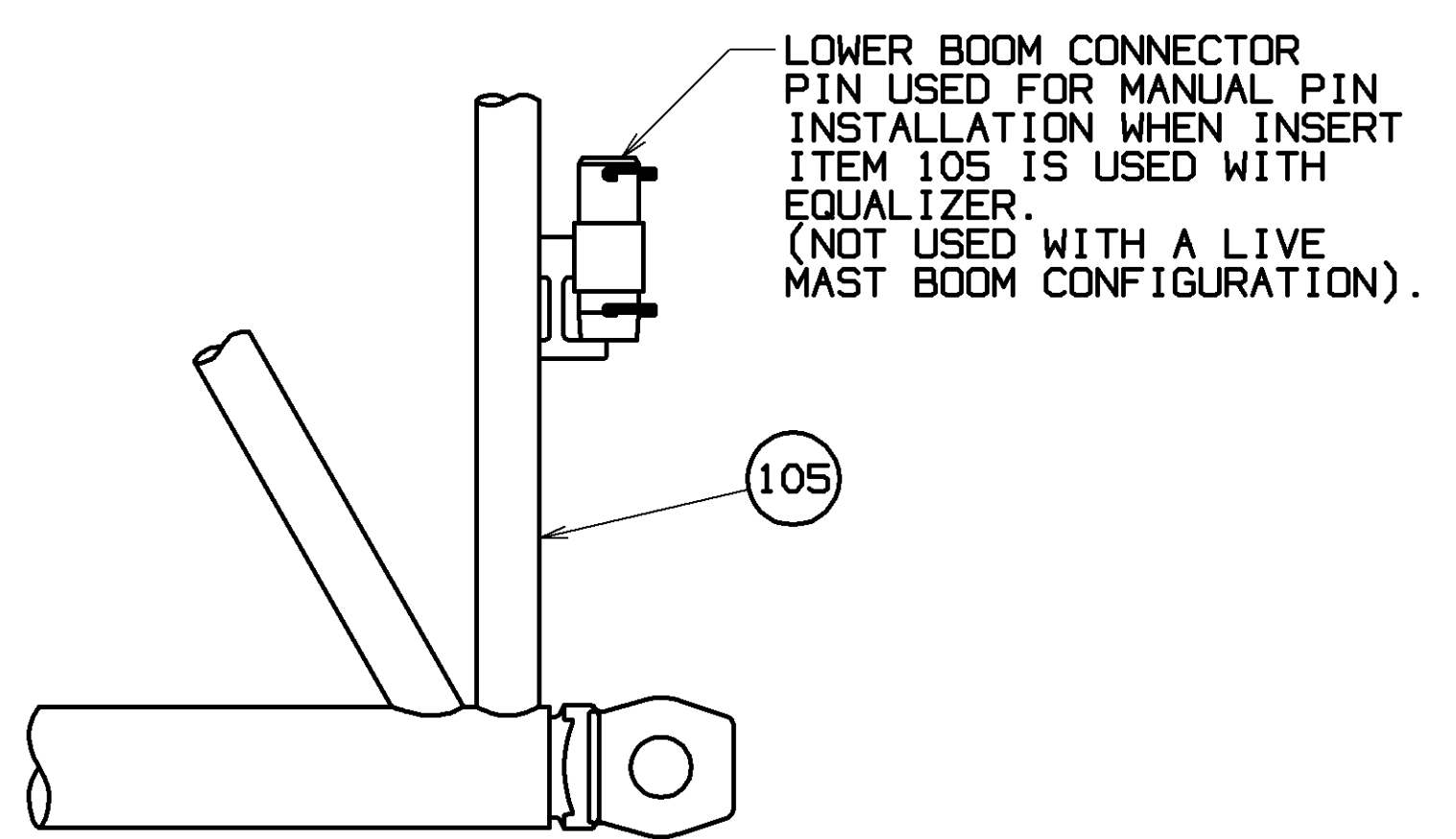
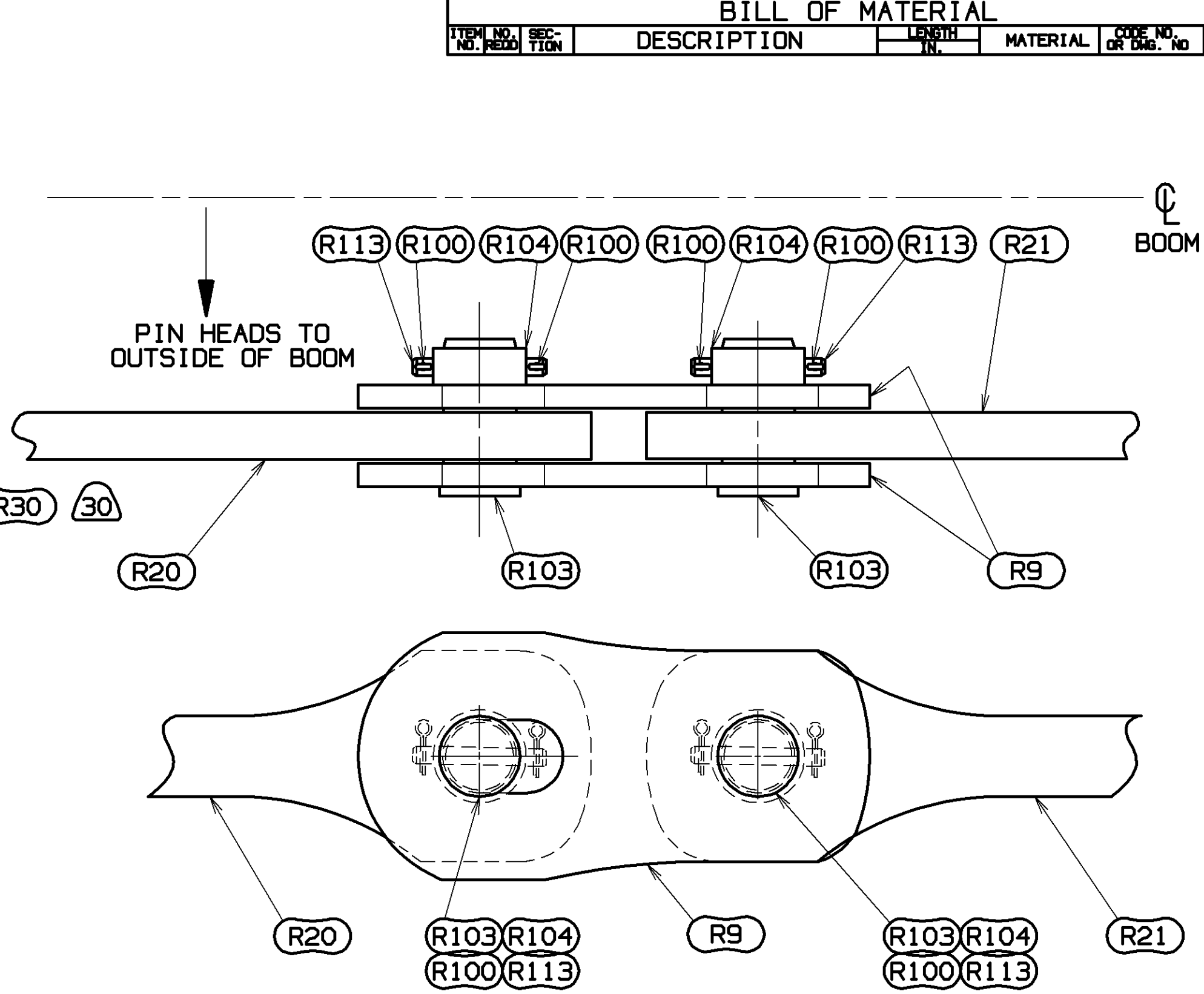
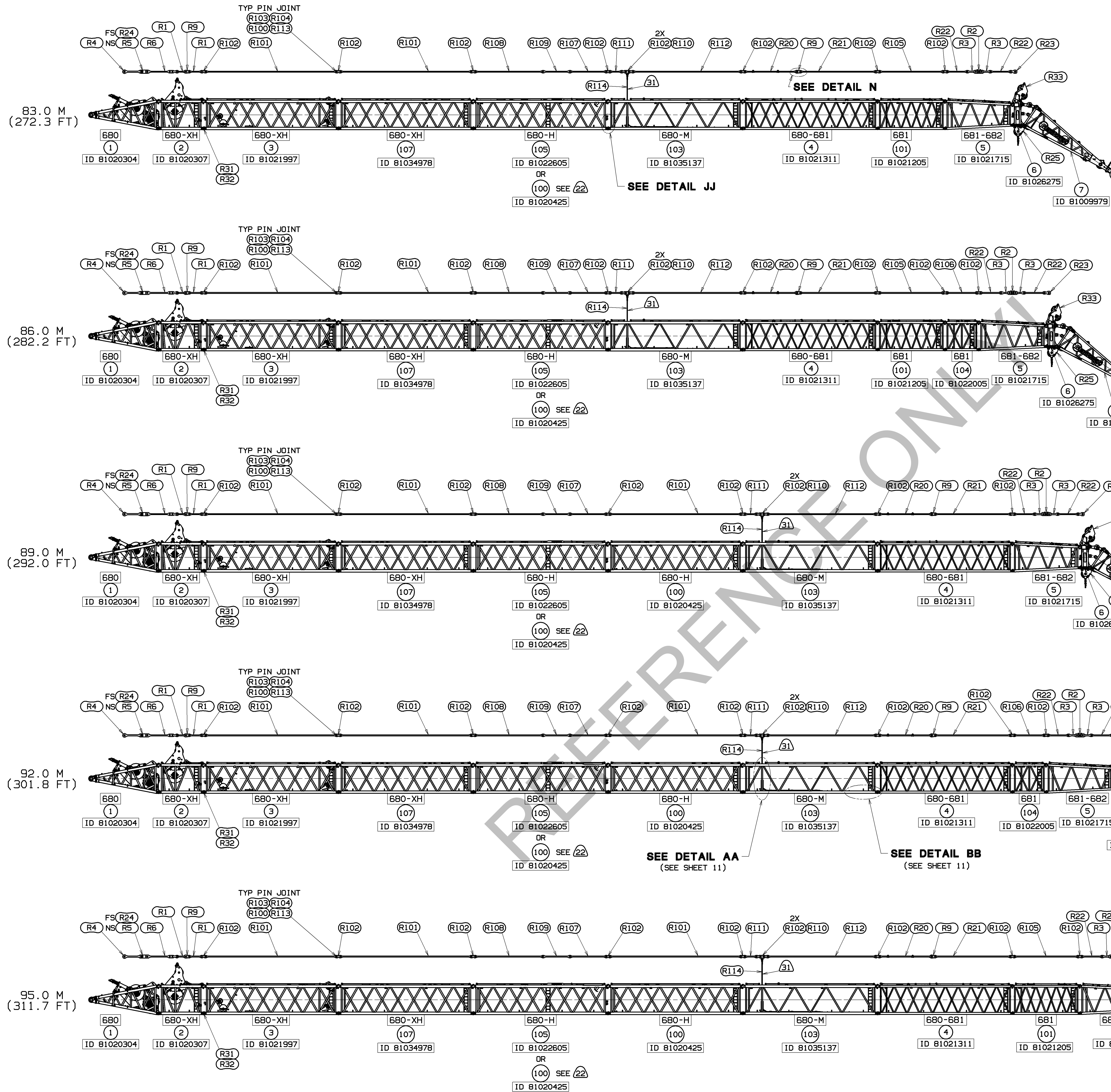
PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
6829103794 FOR
COMPONENTS LISTED
IN GDS500-05-035

DATE
03-24-15

REV. LTR.
C

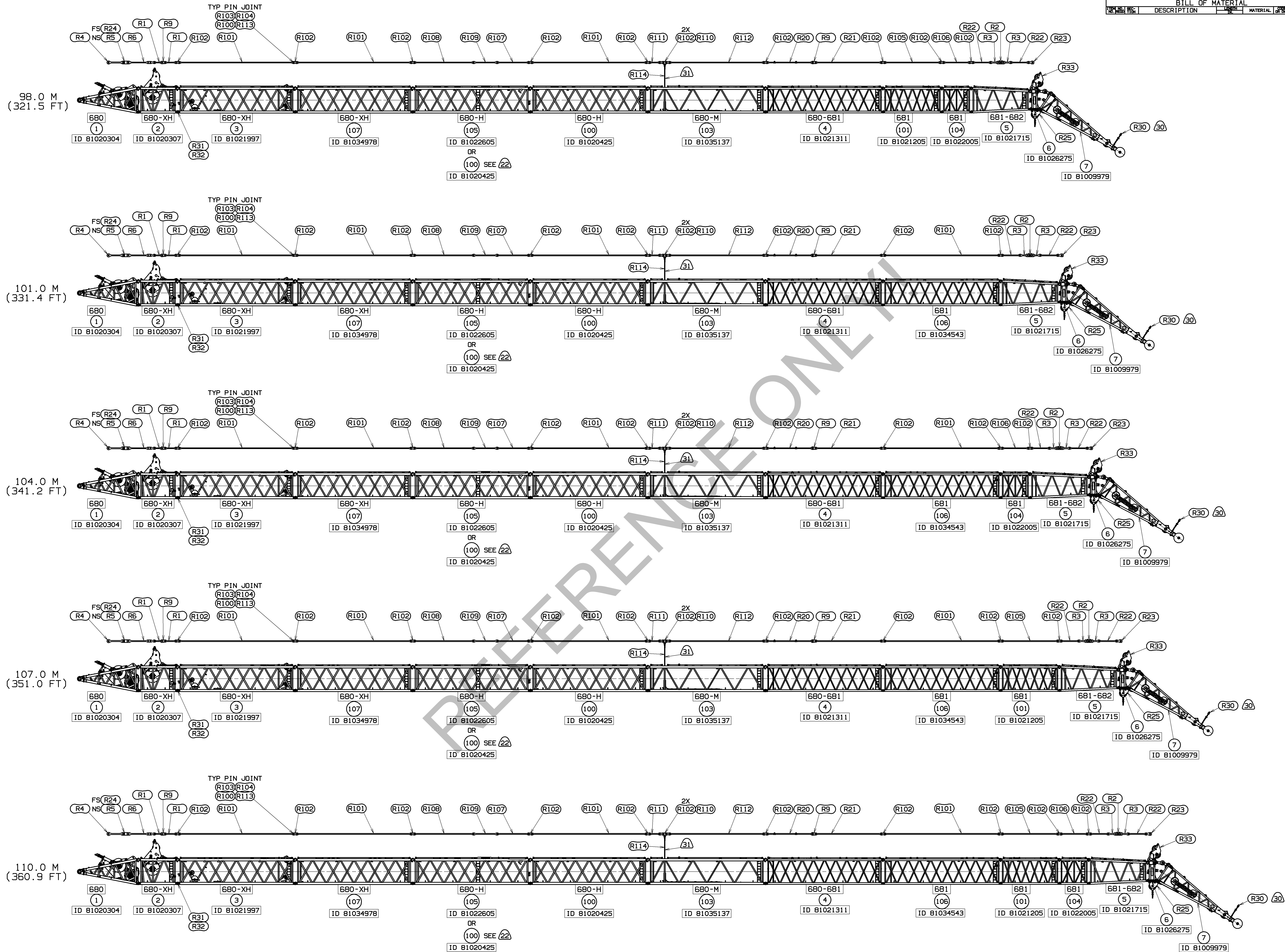
DWG. NO.
81022863





RECOMMENDED BOOM MAKEUP
FOR TYP PIN JOINT SEE SECTIONS B-B, D-D,
VIEW E-E, AND DETAILS H, J, K, L, M & N

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RECOMMENDED BOOM MAKEUP
FOR TYP PIN JOINT SEE SECTIONS B-B, D-D,
VIEW E-E, AND DETAILS H, J, K, L, M & N

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BILL OF MATERIAL				ASSEMBLIES USED IN
QTY	UNIT	DESCRIPTION	MATERIAL	QTY

REVISIONS

81022863
SHT 6 OF 11

PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
8629103794 FOR
COMPONENTS LISTED
IN 86290-06-006
DATE
03-24-15
REF. LIT.
C
81022863
SHT 6 OF 11

TO DISASSEMBLE BOOM

1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. DISCONNECT MAST STRAPS FROM BOOM 4M INSERT STRAPS.
3. CONNECT STRAPS FROM MAST TO 4M INSERT LUGS WITH SHACKLES AND SLINGS.
4. BOOM UP TO REMOVE SLACK FROM BUTT/4M INSERT HANDLING PENDANTS.

WARNING:

DO NOT BOOM UP TO PUT EXCESSIVE TENSION INTO BUTT/4M INSERT HANDLING SLINGS (ENOUGH TENSION IS REQUIRED TO SUPPORT BUTT/4M INSERT WHEN LOWER PINS ARE REMOVED). LIFTING BOOM WITH HANDLING SLINGS WILL DAMAGE MAST AND/OR BOOM BUTT/4M INSERT.

WARNING:

BOOM MUST BE PROPERLY BLOCKED TO PREVENT SHIFTING DURING PIN REMOVAL.

5. REMOVE LOWER CONNECTOR PINS FROM 4M INSERT TO 12M W/SHEAVES AND BOOM DOWN TO BLOCKING TO DISENGAGE UPPER CONNECTOR PINS FROM 4M INSERT TO 12M INSERT W/SHEAVES.
6. SLOWLY BACK AWAY FROM BOOM.
7. REMOVE BOOM BUTT/4M INSERT FROM ADAPTER FRAME.
8. DISASSEMBLE 4M INSERT FROM BUTT.
9. DISASSEMBLE BOOM WITH SELF ASSEMBLY CYLINDER IF DESIRED.
10. DISASSEMBLE EXTENDED UPPER BOOM POINT FROM BOOM PER REVERSAL OF ASSEMBLY PROCEDURE ON DRAWING 81009978 (ITEM 7).

TO ASSEMBLE BOOM

(MAST CAN BE USED TO ASSEMBLE ALL RIGGING COMPONENTS)

1. ASSEMBLE BOOM COMPLETE, WITHOUT BUTT AND 4M INSERT. REFER TO DRAWING 81009978 (ITEM 7) FOR ASSEMBLY PROCEDURE OF EXTENDED UPPER BOOM POINT TO BOOM.
2. ATTACH ROPE GUIDES, STRAPS, LINKS AND PINS AS REQUIRED. (SEE 4M WIRE ROPE GUIDE ARRANGEMENT - SHEET 2) (SEE BOOM TOP 1 METER CAP WIRE ROPE GUIDE ARRANGEMENT - SHEET 10) (SEE DELTA 32). (SEE LOWER BOOM CONNECTOR HYDRAULIC PIN INSTALLATION - DETAIL X SHEET 10) (SEE TOP/TRANSITION STRAP CONNECTION - DETAIL DD SHEET 9)
3. POSITION BOOM BUTT WITH SUPPORT PEDESTAL DEPLOYED. (STEP 1) (SEE DETAIL S ON SHEET 8)
4. ASSEMBLE 4M INSERT TO BOOM BUTT. (STEP 2) (SEE DETAIL T ON SHEET 8)
5. INSTALL BUTT/4M INSERT ASSEMBLY WITH MAST AND MAST CYLINDER. (OPTIONAL)

BUTT/4M INSERT INSTALLATION (STEP 3)

1. SUPPORT BUTT/4M INSERT WITH MAST CYLINDER, SHACKLE AND SLINGS AND SHACKLE TO HANG APPROXIMATELY LEVEL. (SEE DETAIL U ON SHEET 8)
2. POSITION HINGE PIN ALIGNMENT SUPPORT ON PIN (SEE DETAIL W ON SHEET 10)
3. POSITION PIN PULLER ASSY (R204) INTO PIN PULLER CAGE WELDMENT (R203) AND ACTIVATE CYLINDER TO INSTALL HINGE PIN INTO BUTT. (SEE DETAIL W - BOOM HINGE PIN INSTALLATION ON SHEET 10)
6. LOWER MAST TO DISCONNECT HANDLING SLINGS AND SHACKLES FROM LIVE MAST CYLINDER AND BUTT/4M INSERT ASSEMBLY.

WARNING:

DO NOT BOOM DOWN MAST BEYOND 158° WITHOUT ATTACHING ASSIST CRANE OR MAST CAN FALL.

7. RAISE MAST AND STOW SELF-ASSEMBLING MAST CYLINDER (R8).
8. LOWER MAST OVER END ONLY TO ATTACH LIVE MAST STRAP (R1) TO CLOSING LUGS ON 4M INSERT WITH SHACKLE, SLING AND SHACKLE. (STEP 4). INSTALL BUSHINGS (R209) INTO STRAP (R1) HOLES WITH SHACKLE (R202). ATTACH STRAP (R207) BETWEEN SLINGS (R205) AS SPREADER. (SEE DETAIL V ON SHEET 8)
9. BOOM UP TO CLEAR GROUND WITH 4M INSERT.
10. POSITION MACHINE TO ALIGN UPPER PIN CONNECTOR ON 4M INSERT WITH UPPER PIN CONNECTOR PINS ON 12M INSERT W/SHEAVES AND ENGAGE PINS. (STEP 4)
11. SLOWLY BOOM UP TO ALIGN LOWER PIN CONNECTOR HOLES ON 4M INSERT WITH LOWER CONNECTOR HOLES ON 12M INSERT W/SHEAVES.
12. INSTALL LOWER BOOM CONNECTOR PINS (R32). (SEE DETAIL NN ON SHEET 10).

WARNING:

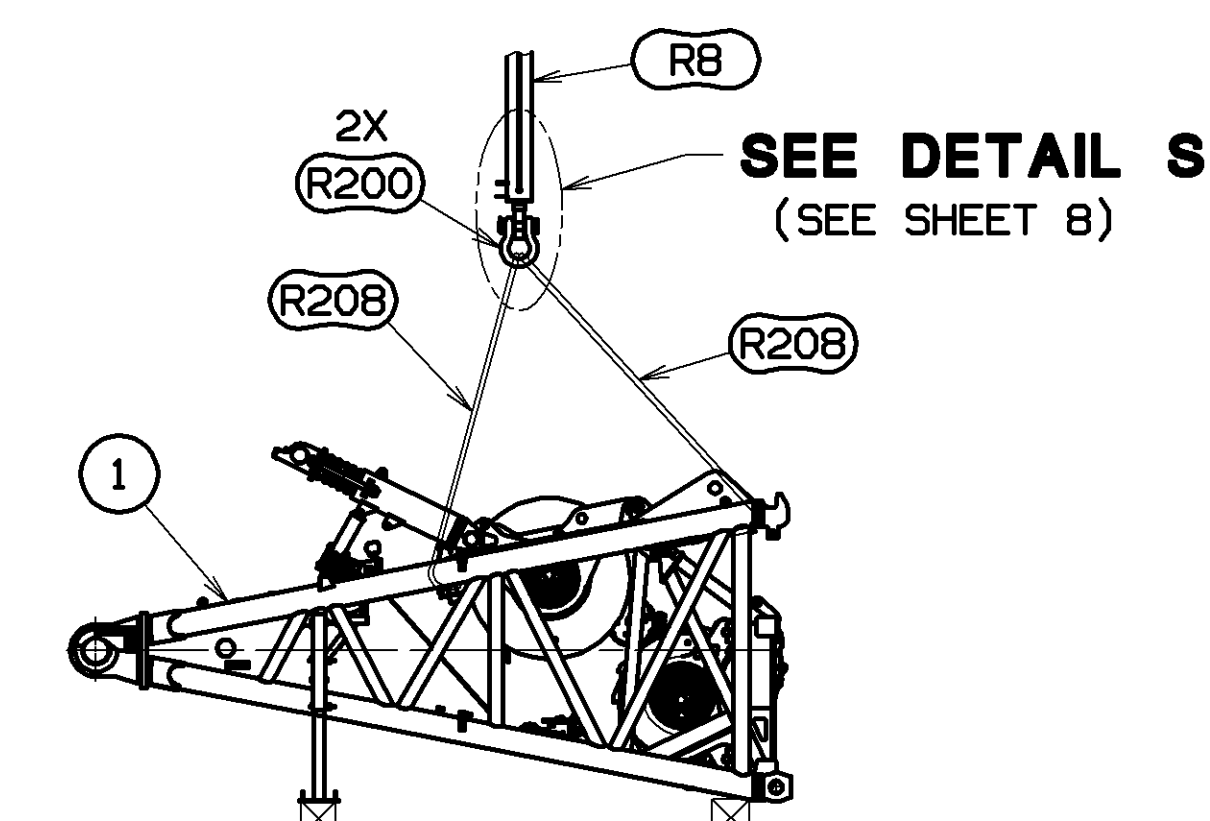
DO NOT BOOM UP PAST LOWER CONNECTOR HOLES. IF BOOMING UP CONTINUES AFTER CONNECTORS BOTTOM OUT OR AFTER PINS ARE INSERTED, DAMAGE TO MAST AND/OR BOOM BUTT/4M INSERT WILL OCCUR.

13. BOOM DOWN TO DISCONNECT BOOM HANDLING SLINGS AND SHACKLES FROM LIVE MAST STRAP (R1) AND 4M INSERT. REMOVE BUSHINGS (R209) FROM STRAP (R1) AND LOCATE TO STOWAGE POSITION ON 4M INSERT. (SEE DETAIL R)
14. BOOM DOWN TO ATTACH BOOM STRAPS ON MAST TO 4M INSERT STRAPS. (STEP 5)

WARNING:

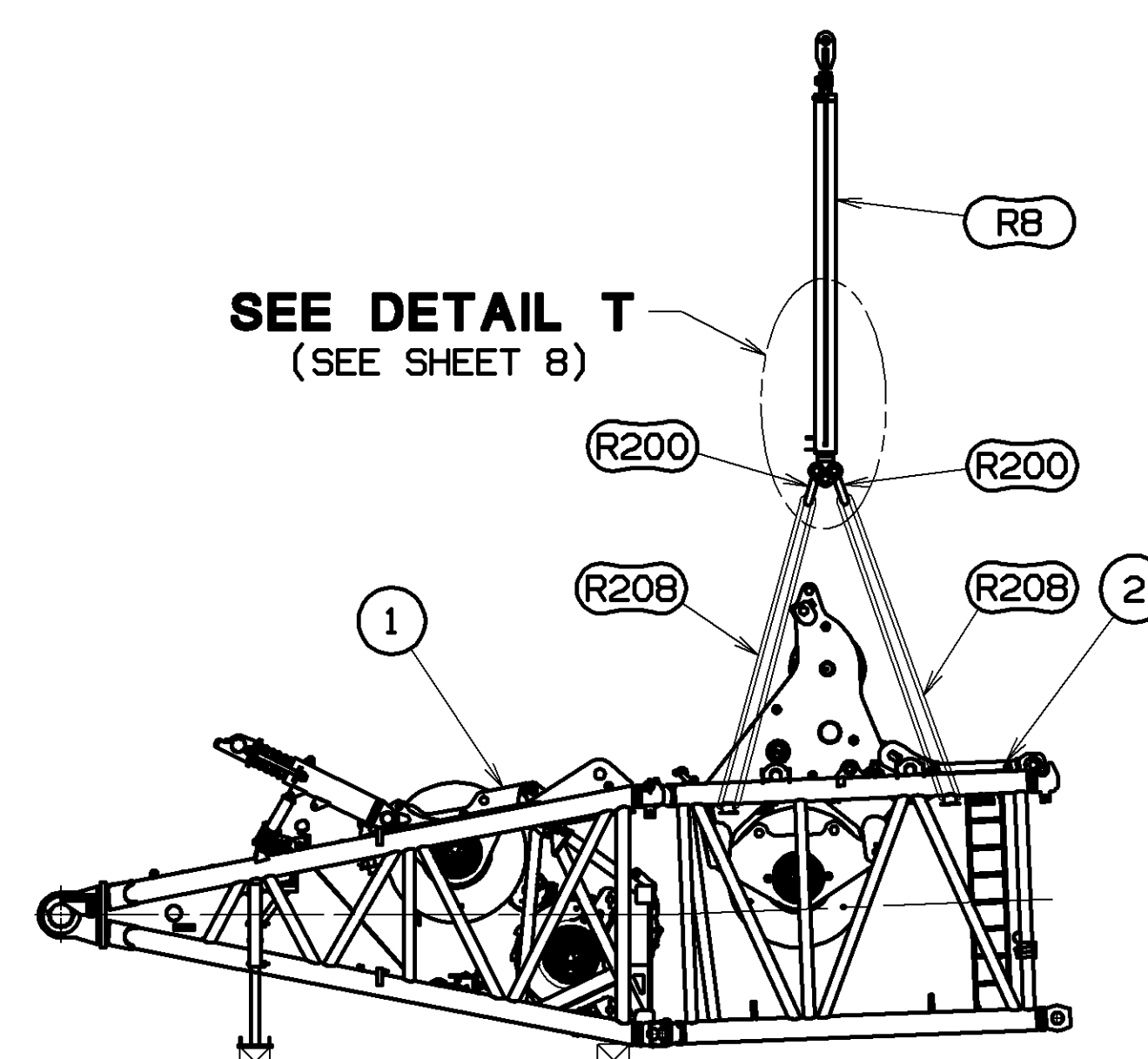
DO NOT BOOM DOWN MAST BEYOND 158° WITHOUT ATTACHING ASSIST CRANE OR MAST CAN FALL.

15. BOOM UP TO DESIRED BOOM ANGLE.



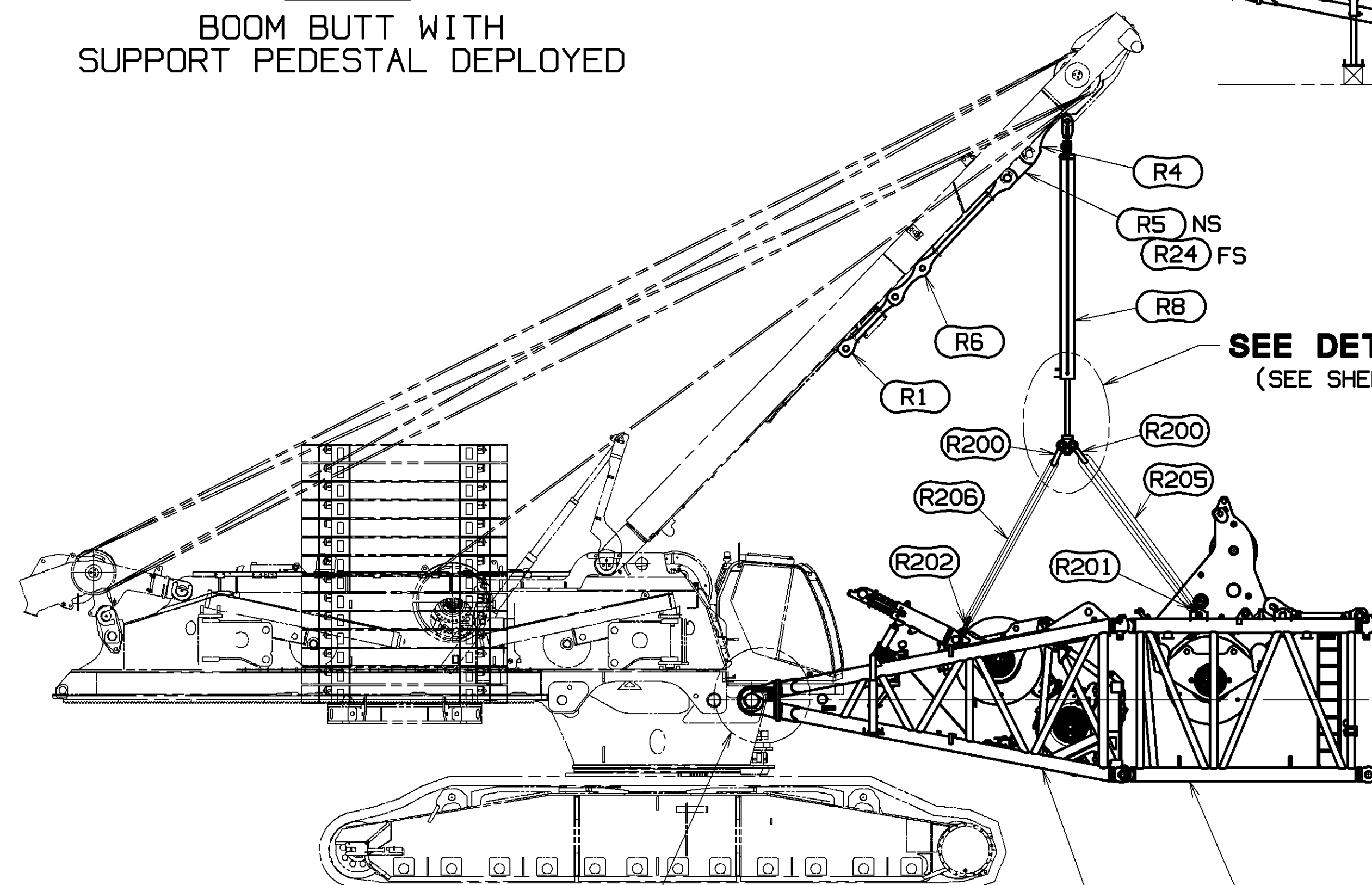
STEP 1
BOOM BUTT WITH
SUPPORT PEDESTAL DEPLOYED

SEE DETAIL T
(SEE SHEET 8)



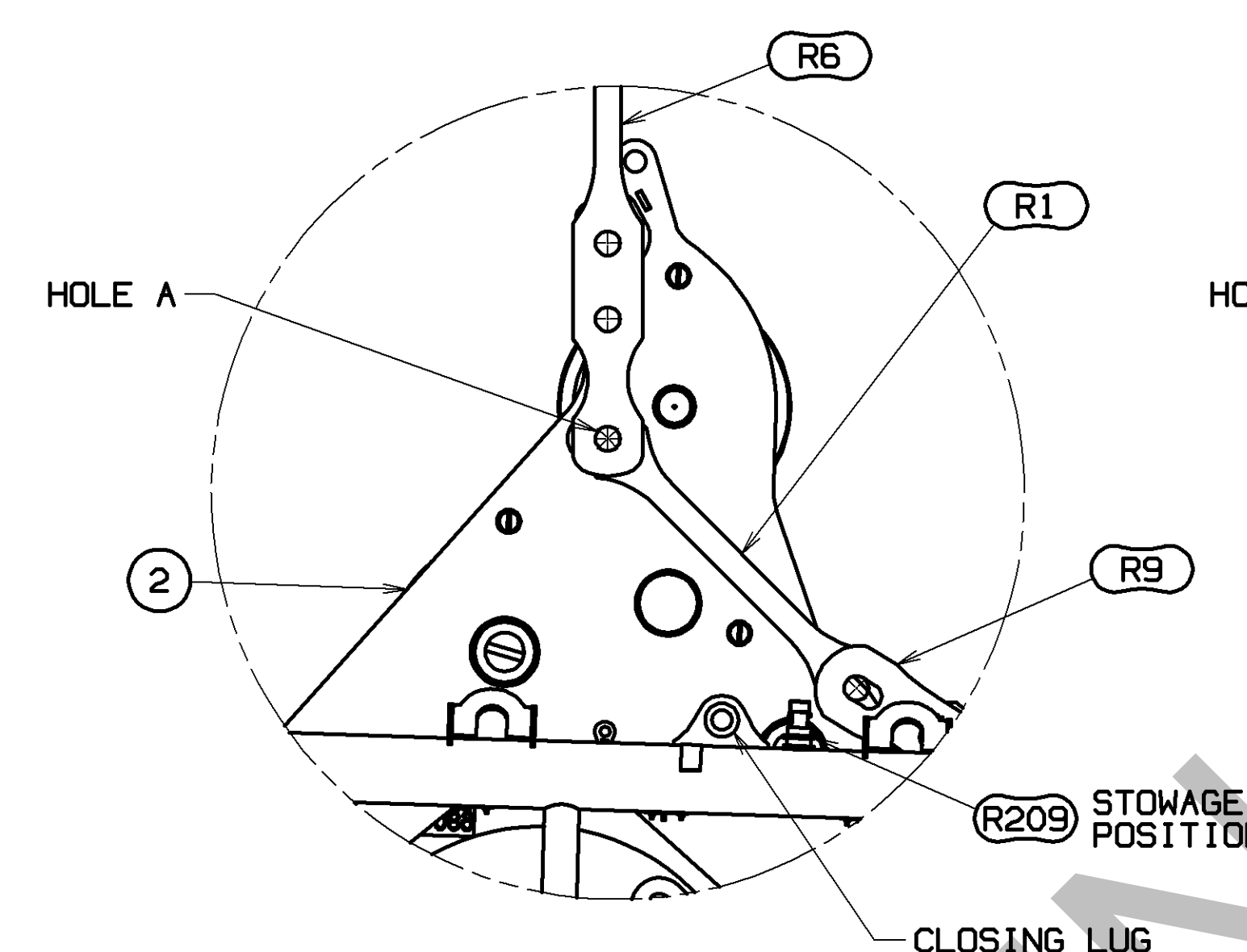
STEP 2
4M INSERT TO BOOM BUTT

SEE DETAIL U
(SEE SHEET 8)

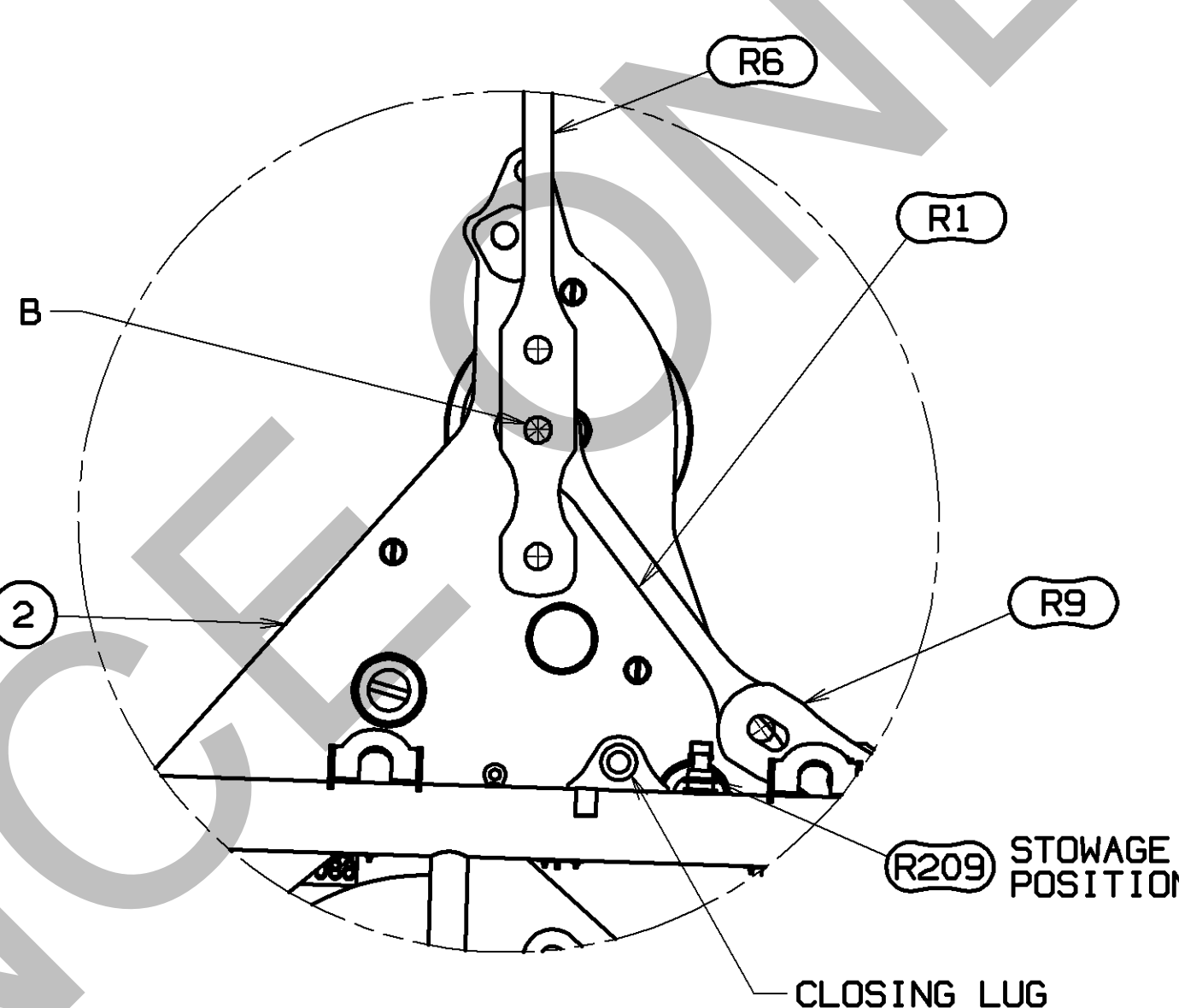


SEE DETAIL W
(SEE SHEET 10)

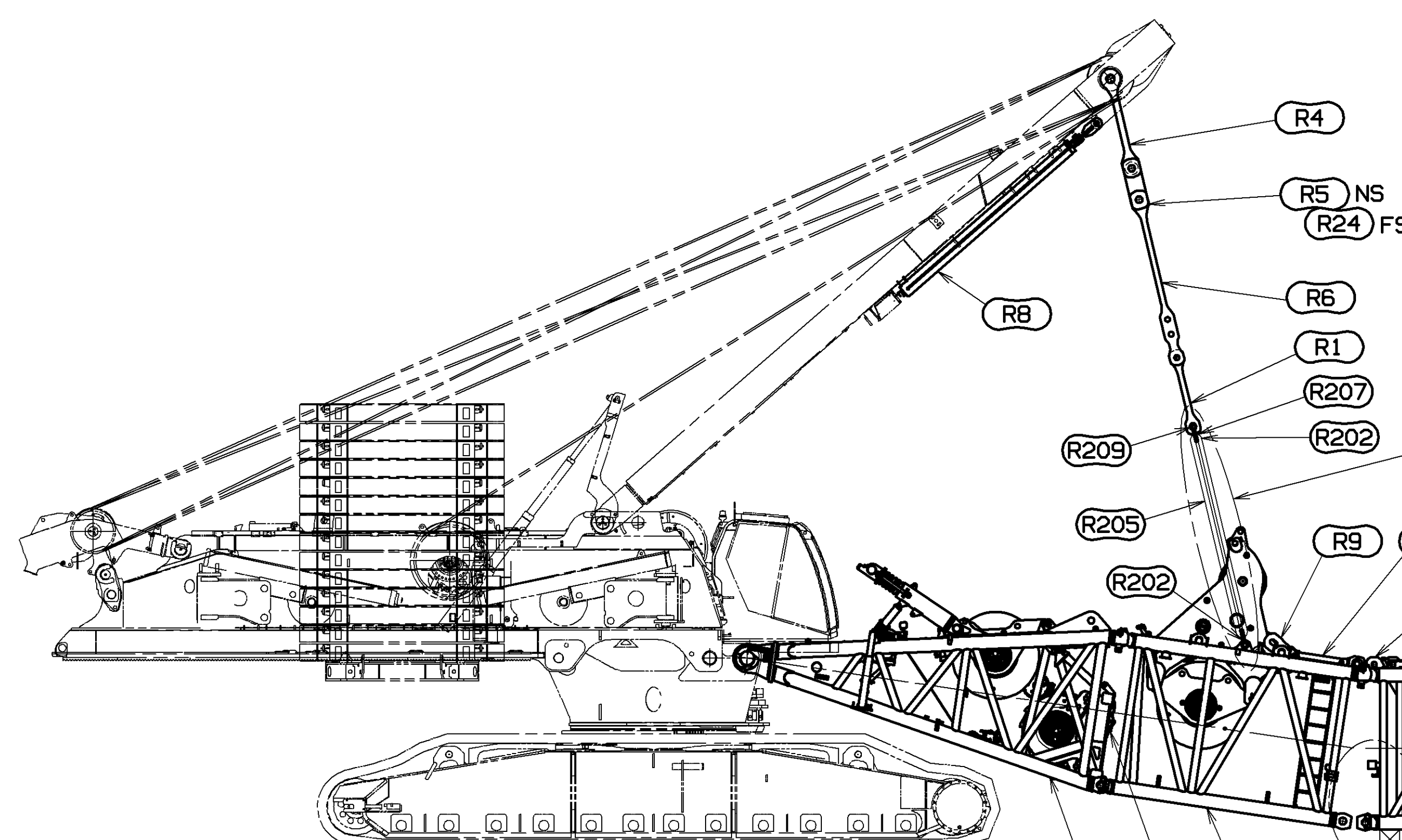
STEP 3
BUTT/4M INSERT INSTALLATION



DETAIL R
REFER TO BOOM LENGTH MAKE-UP TABLE - SHEET 2
FOR LIVE MAST ADJUSTMENT HOLE IDENTIFICATION
SCALE 0.050



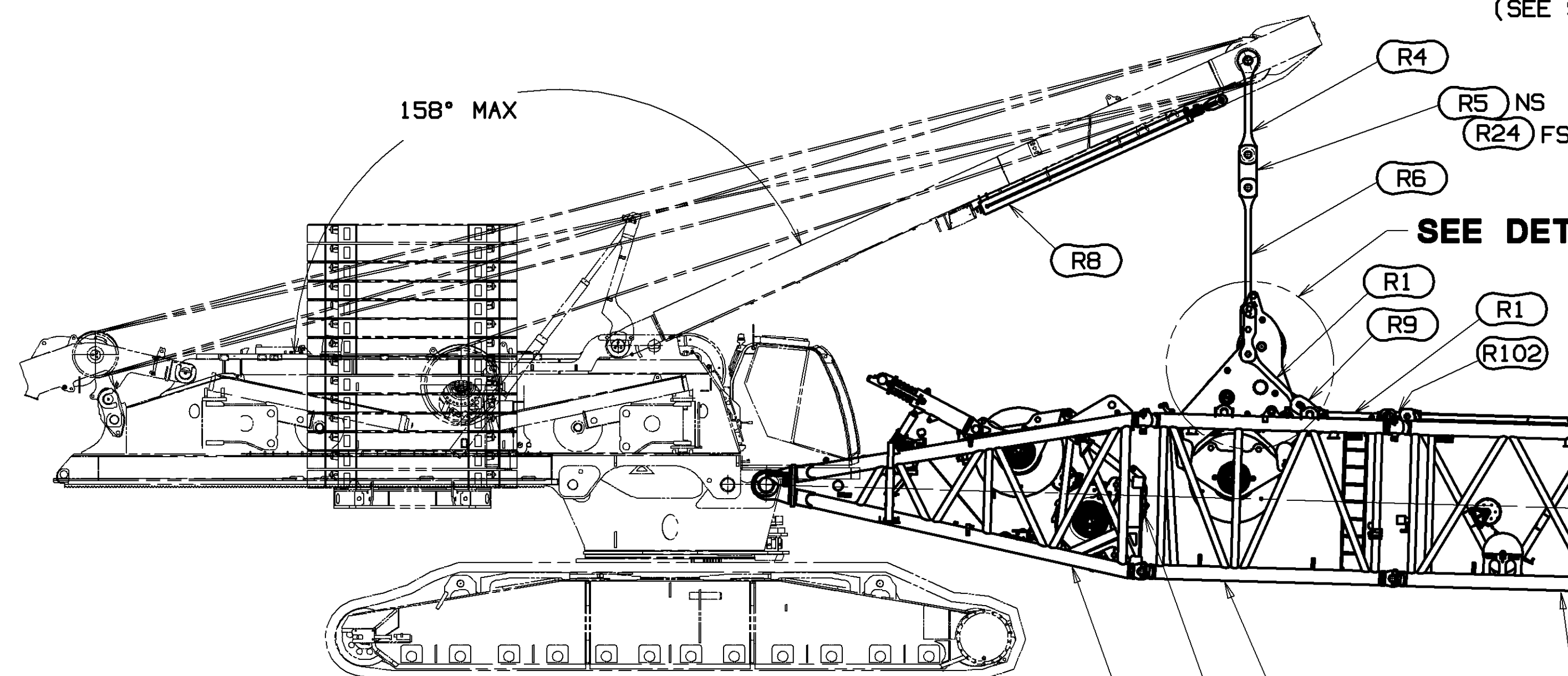
SEE DETAIL V
(SEE SHEET 8)



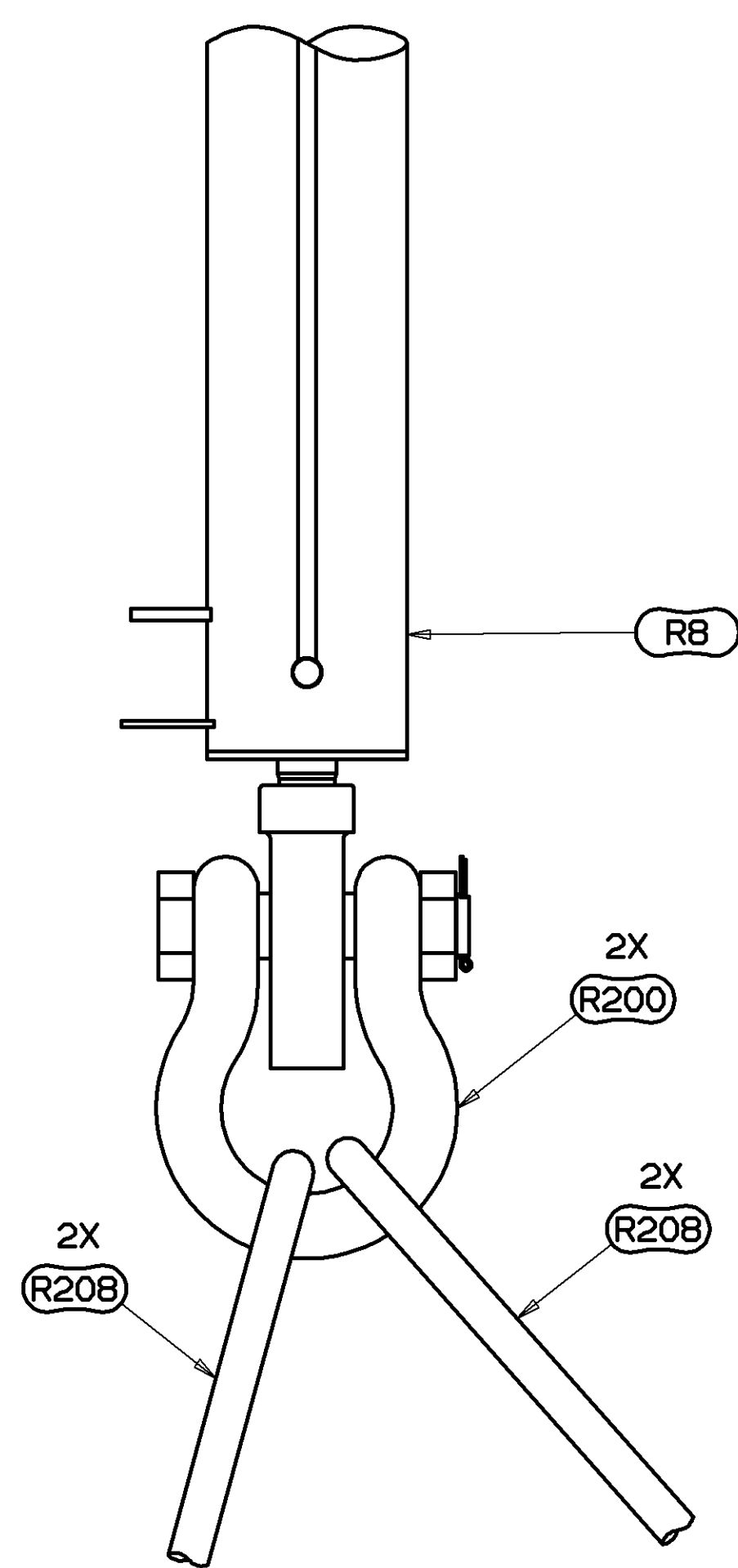
SEE DETAIL HH
(SEE SHEET 10)

STEP 4
BOOM CLOSING

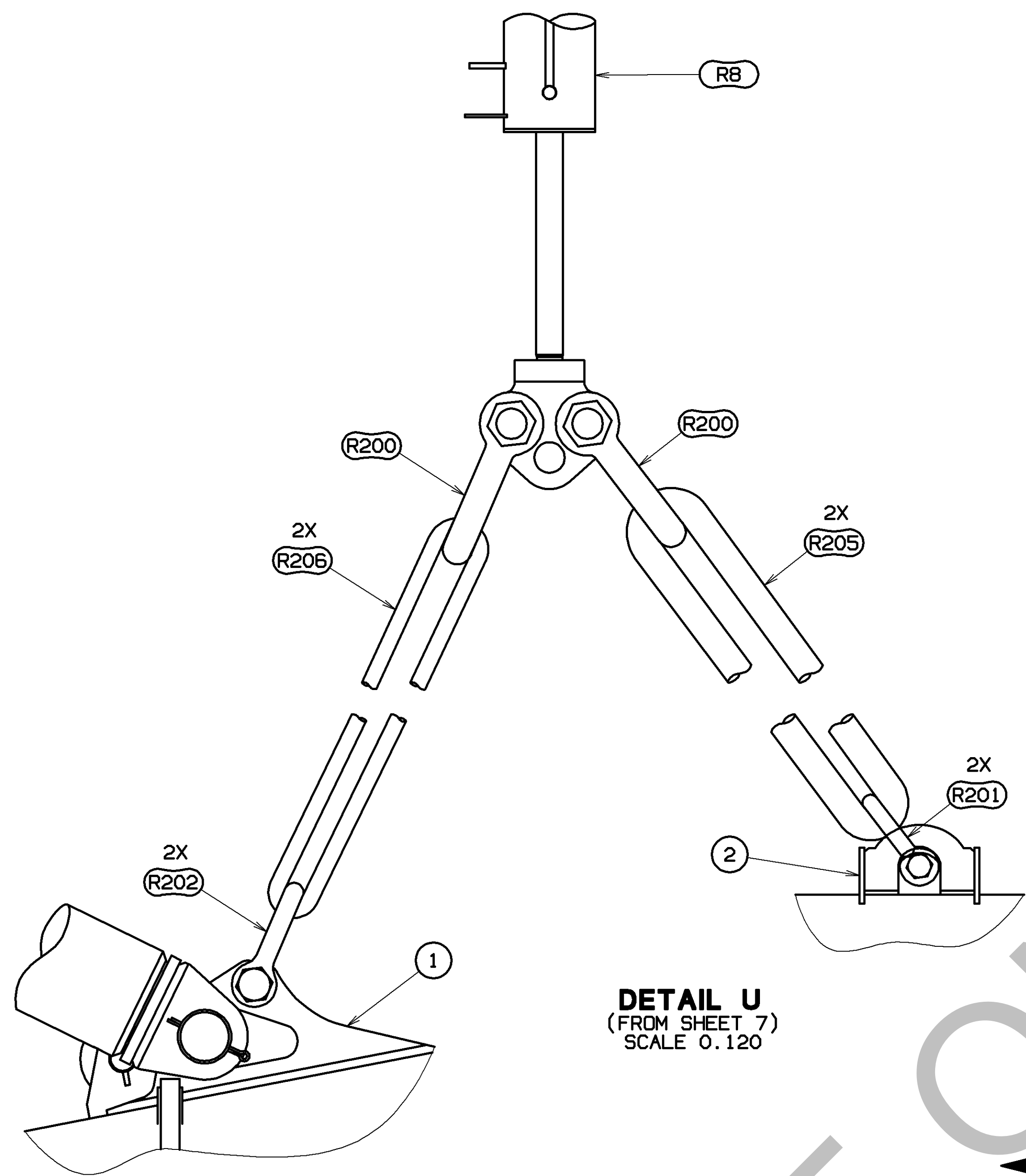
SEE DETAIL X
(SEE SHEET 10)
SEE 32



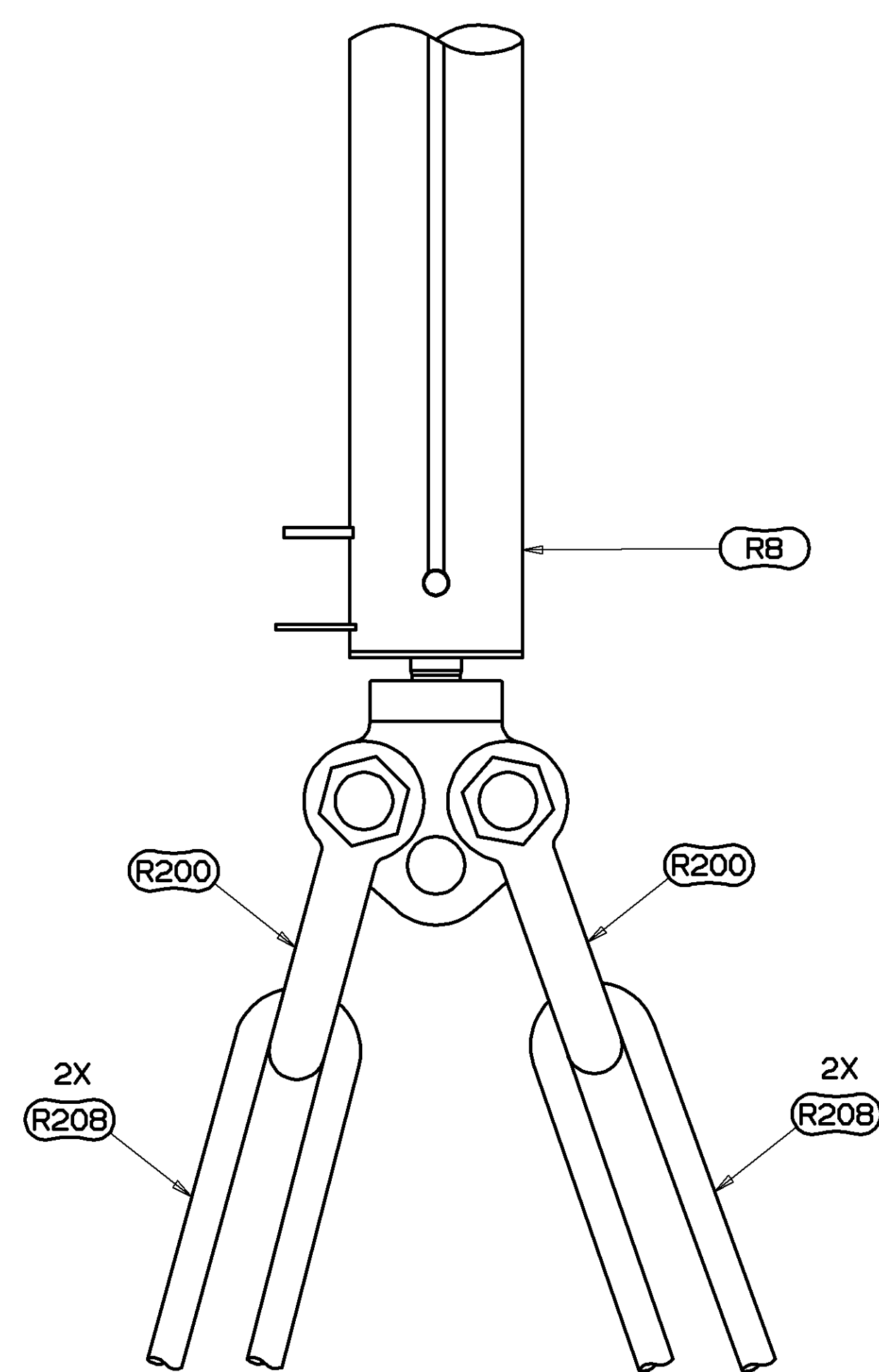
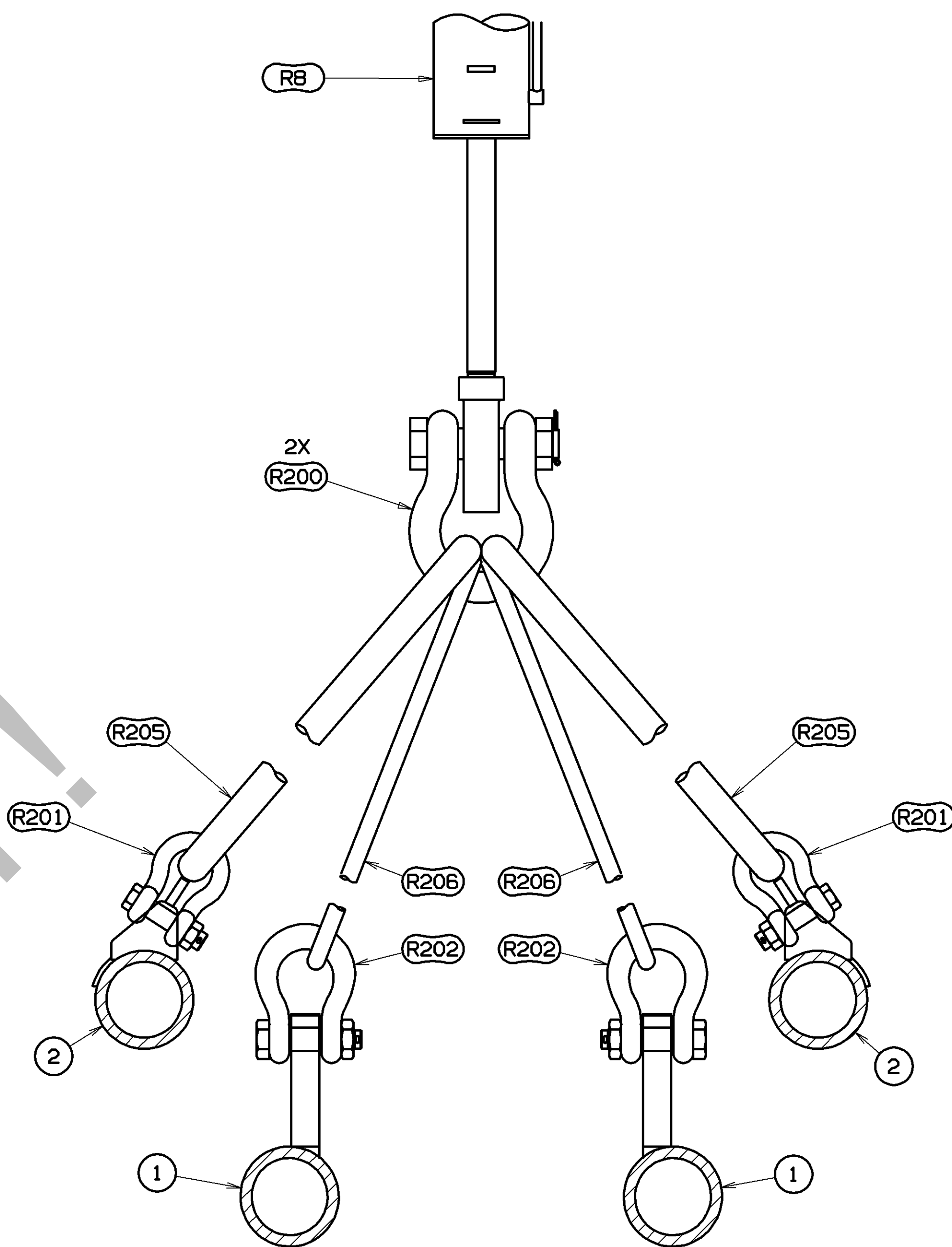
STEP 5
STRAP HOOKUP



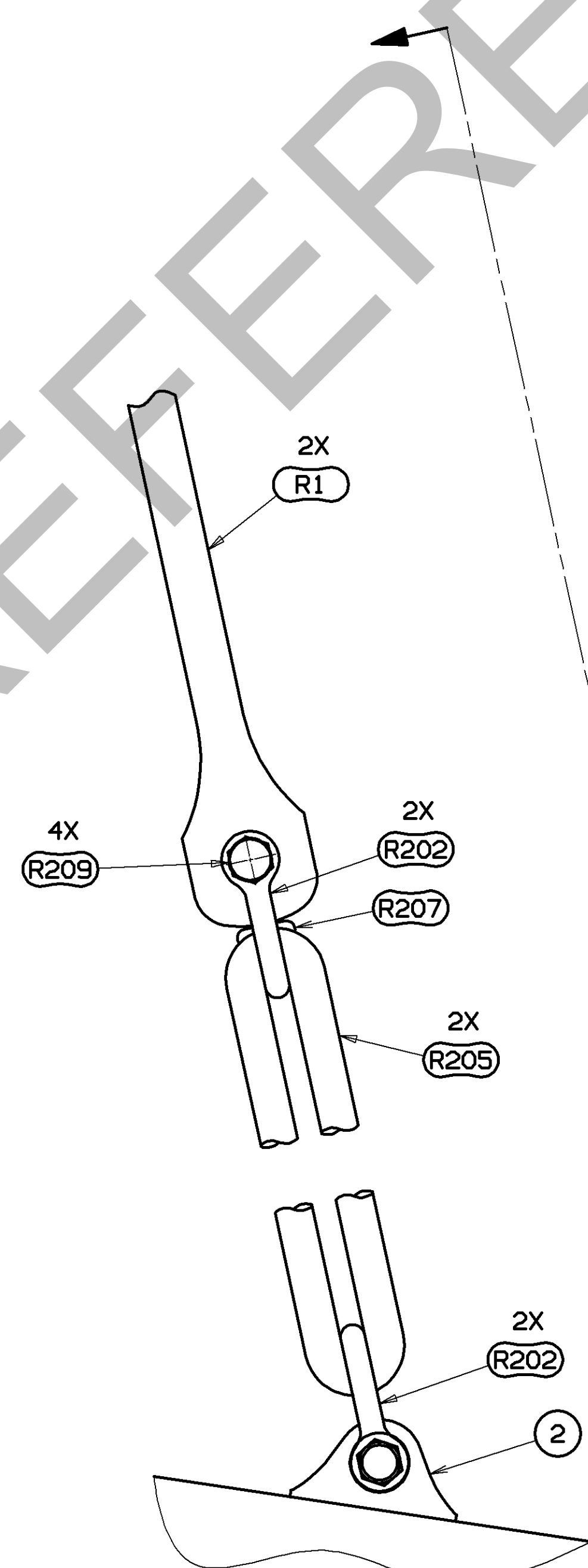
DETAIL S
(FROM SHEET 7)
SCALE 0.150



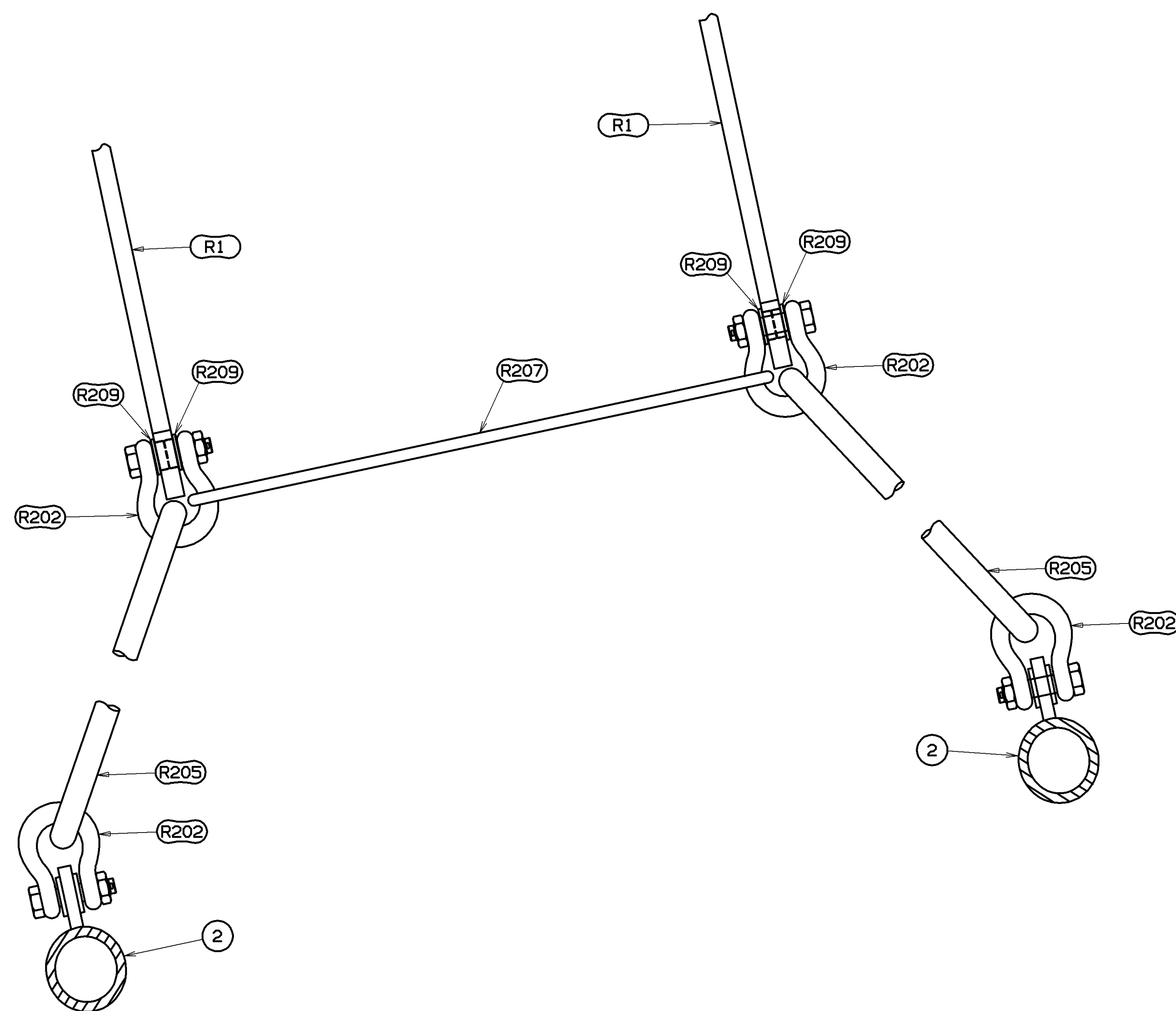
DETAIL U
(FROM SHEET 7)
SCALE 0.120



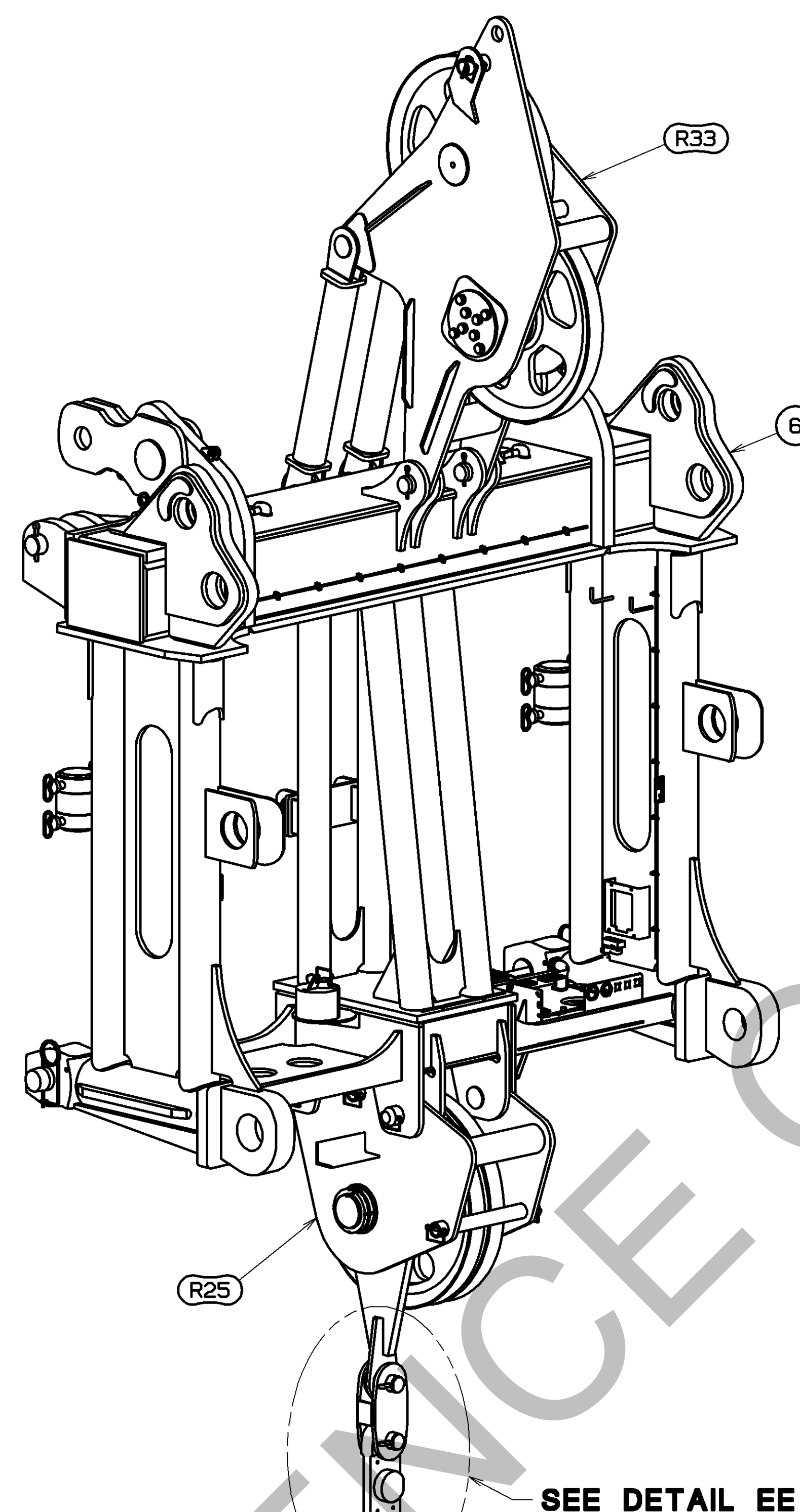
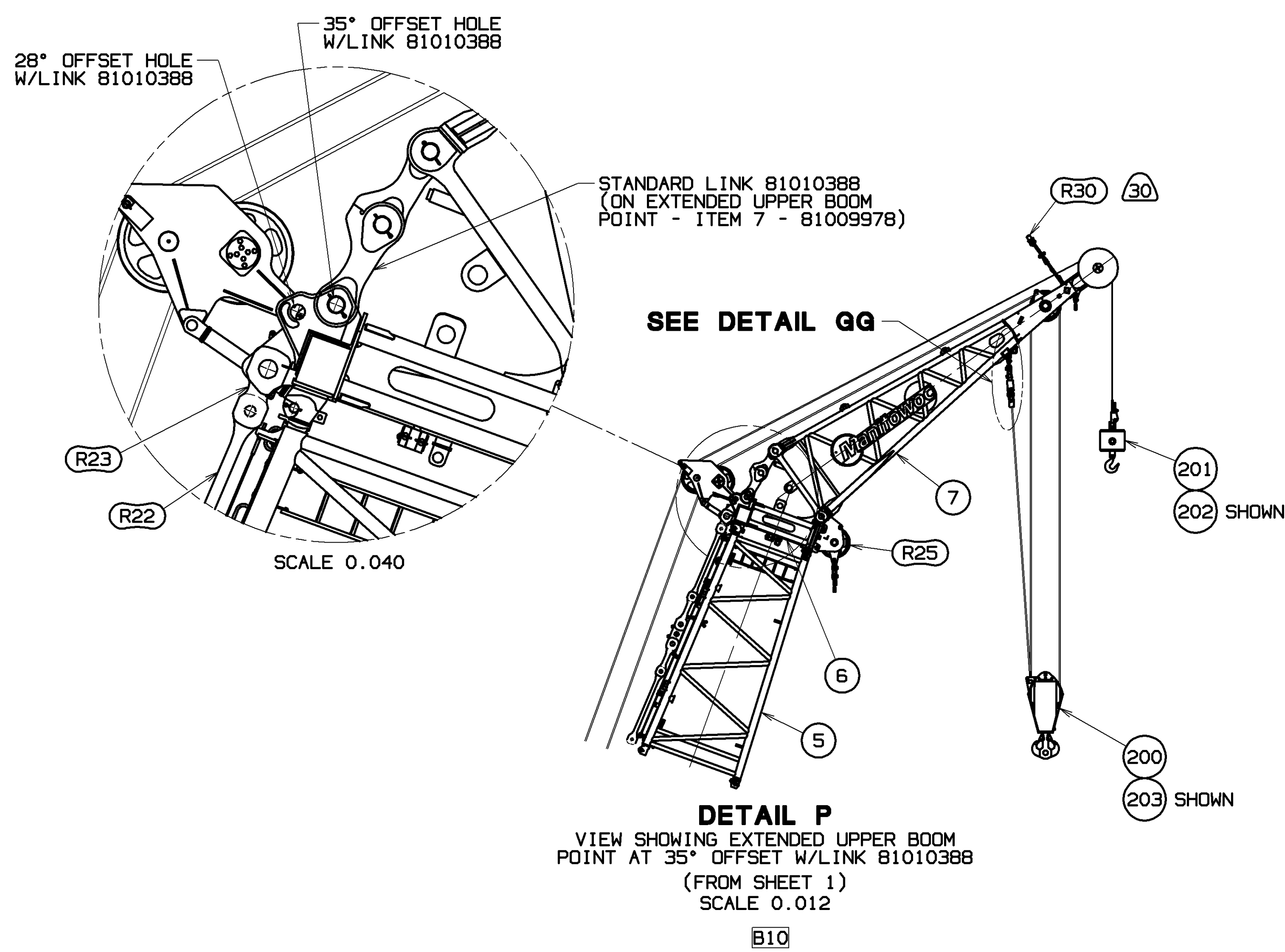
DETAIL T
(FROM SHEET 7)
SCALE 0.150



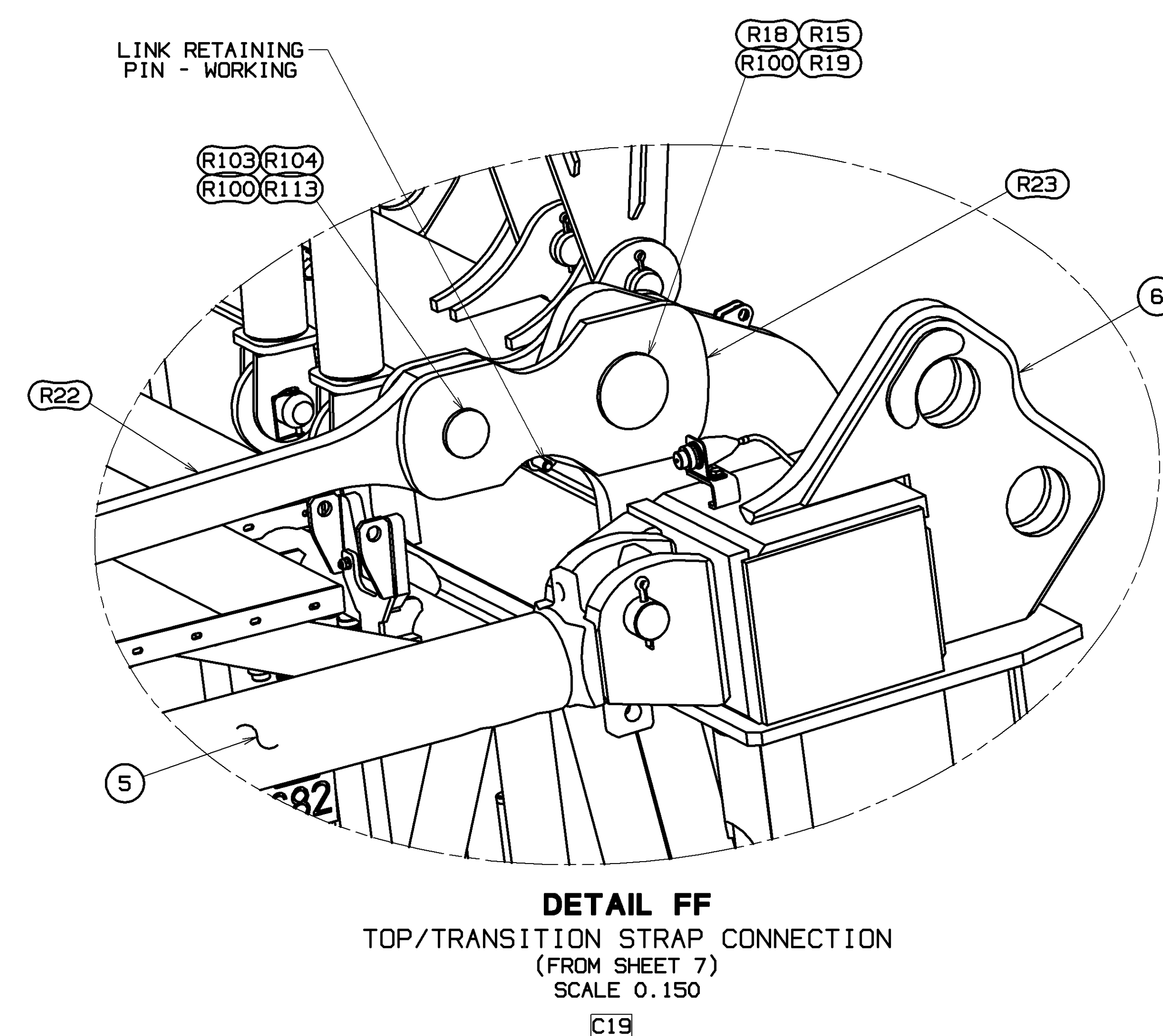
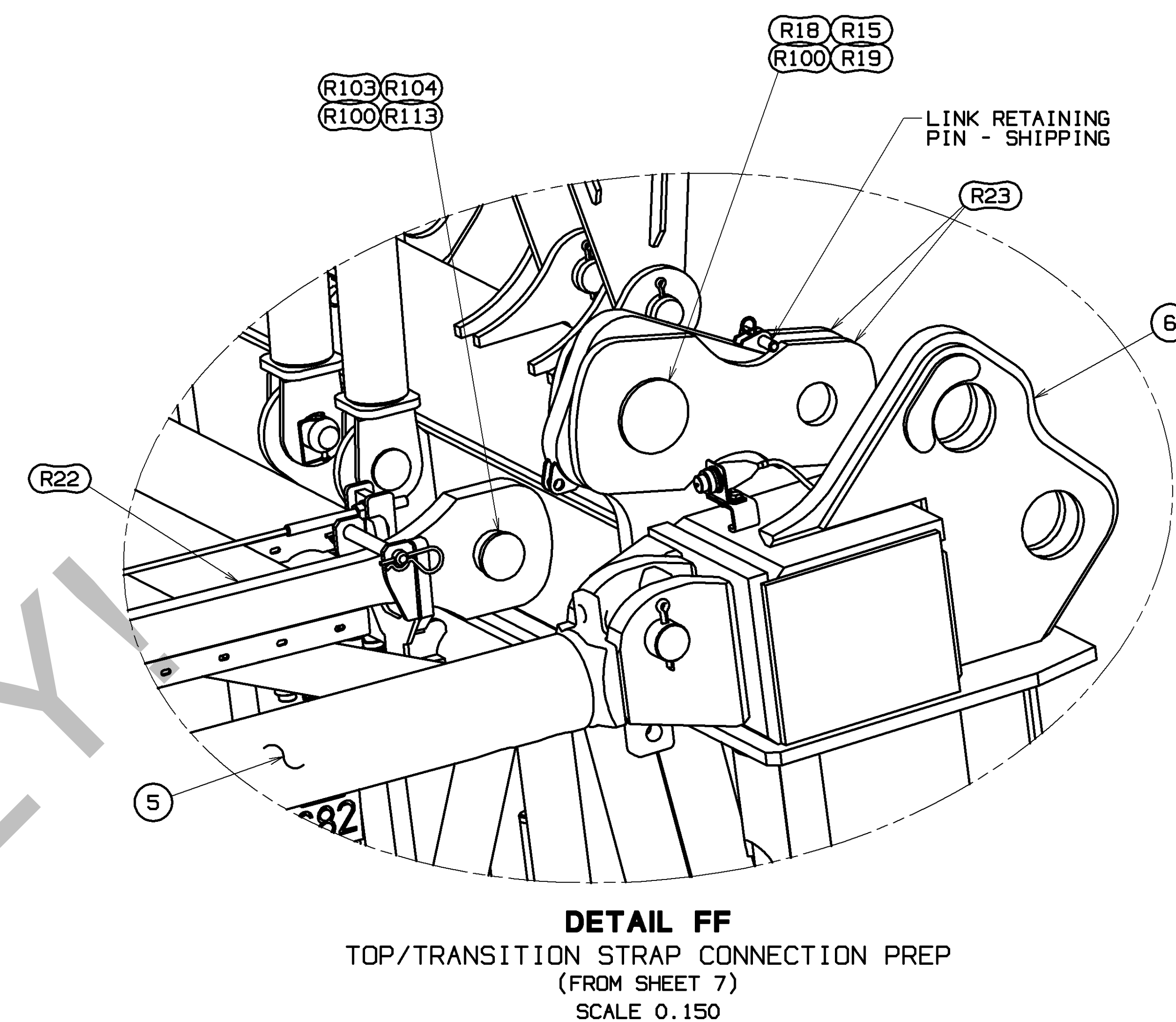
DETAIL V
(FROM SHEET 7)
SCALE 0.120



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ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, IT IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND NO REPRODUCTION THEREOF OR DISSEMINATION IN ANY MANNER IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF MANITOWOC CRANES, INC.		DECIMAL PLACES		FABRICATION		DR. AUB		C	
		± 10 FEET		± 10 FEET		Manitowoc, Wisconsin		BOOM RIGGING	
		(1) PLACE 0.0		± .12 ± .18 ± .03		CK. RHV		B40:680-681-682	
		(2) PLACE 0.00		± .06 ± .12 ± .015		MODEL MLC650		DATE	
		(3) PLACE 0.000		± .002 ± .005 ± .001		APP TJA		81022863	
								</	



BOOM TOP W/LOWER POINT ASSY
(OPTIONAL 2-SHEAVE CONFIGURATION)
SCALE 0.075



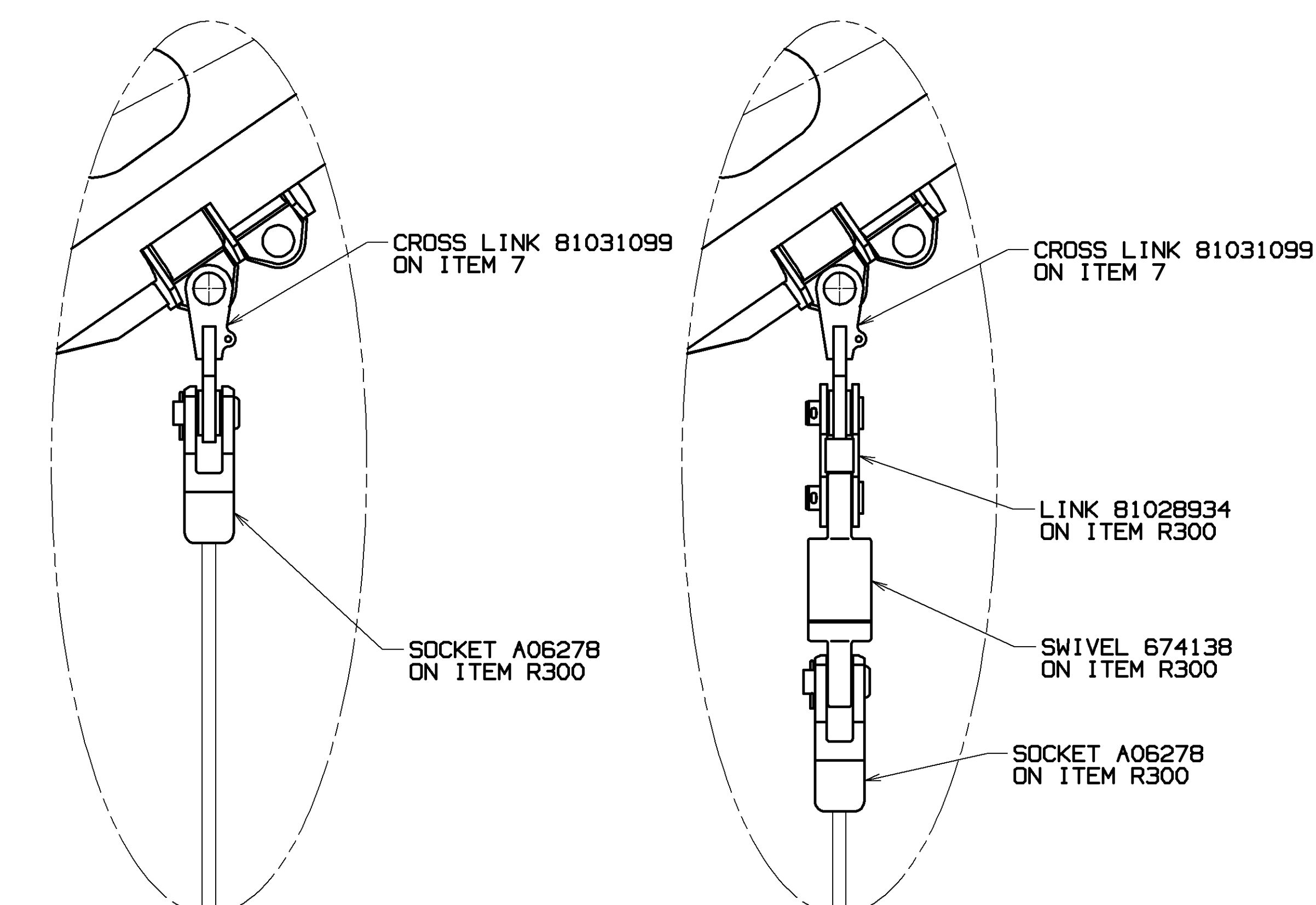
BOOM TOP ASSY LINKS TO TRANSITION INSERT STRAP INSTALLATION
(SEE DETAIL FF-TOP/TRANSITION STRAP CONNECTION PREP)

1. WITH STRAP AND LINKS IN STORAGE POSITION REMOVE LINK RETAINING PIN FROM SHIPPING POSITION ON TOP ASSY ITEM 6.

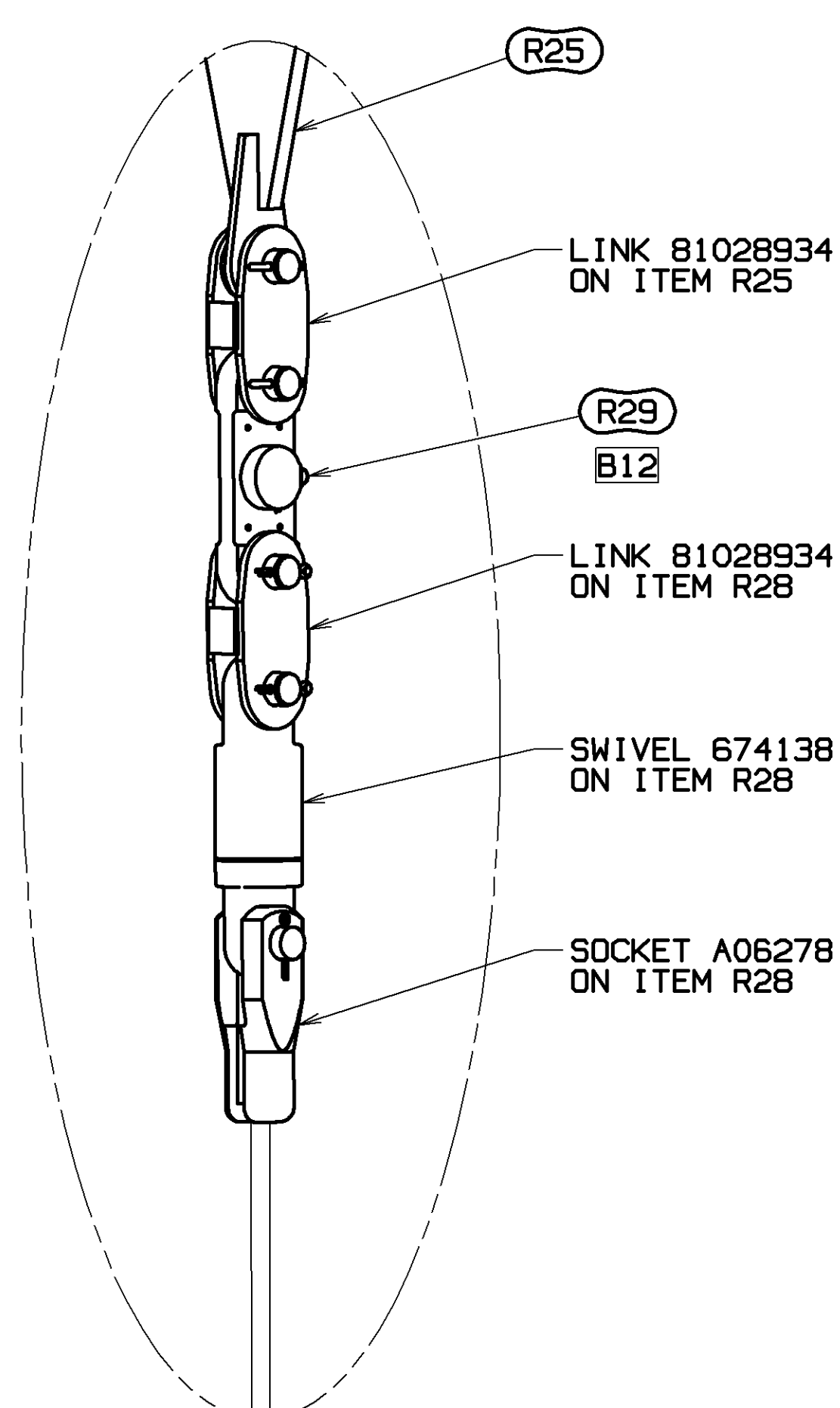
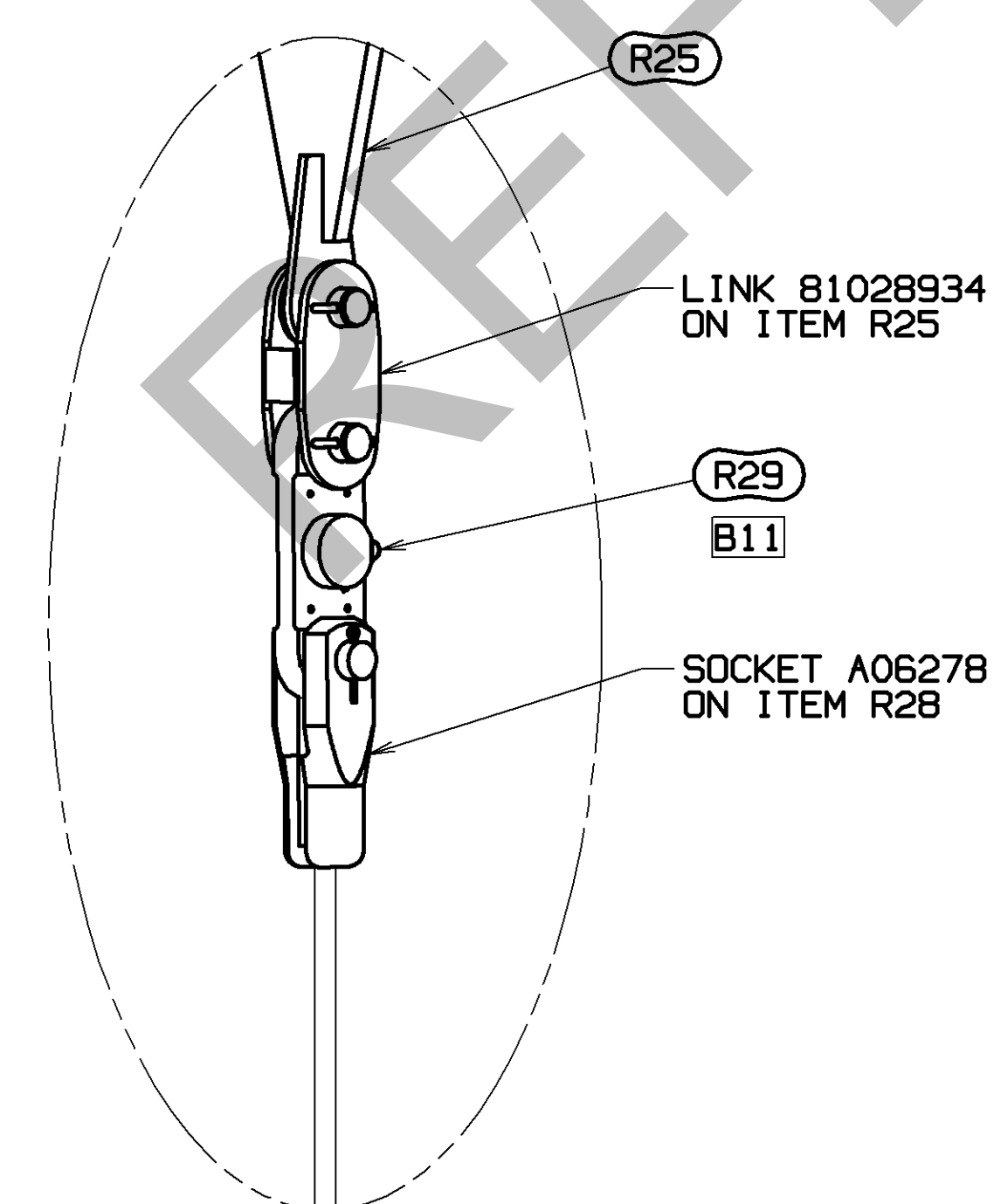
(SEE DETAIL FF-TOP/TRANSITION STRAP CONNECTION)

2. RELOCATE LINK RETAINING PIN TO WORKING POSITION.
3. ROTATE LINKS (R23) TO REST ON LINK RETAINING PIN.
4. ELEVATE STRAP (R22) TO PIN HOLES AND INSTALL PIN (R103), COLLAR (R104), PIN (R113) AND COTTERS (R100).

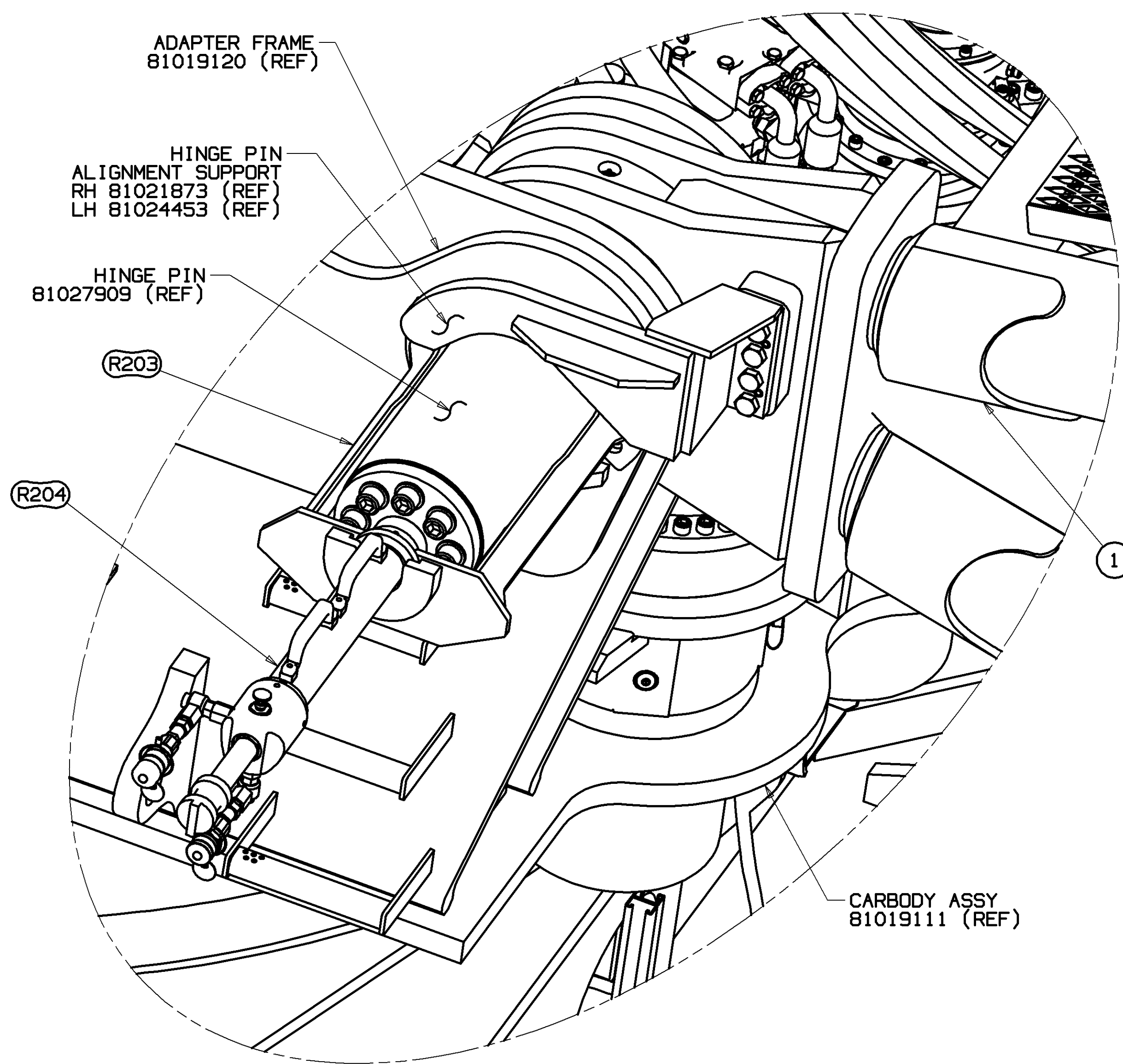
REVERSE INSTALLATION STEPS 1 THRU 4 TO RETURN TO SHIPPING POSITION.



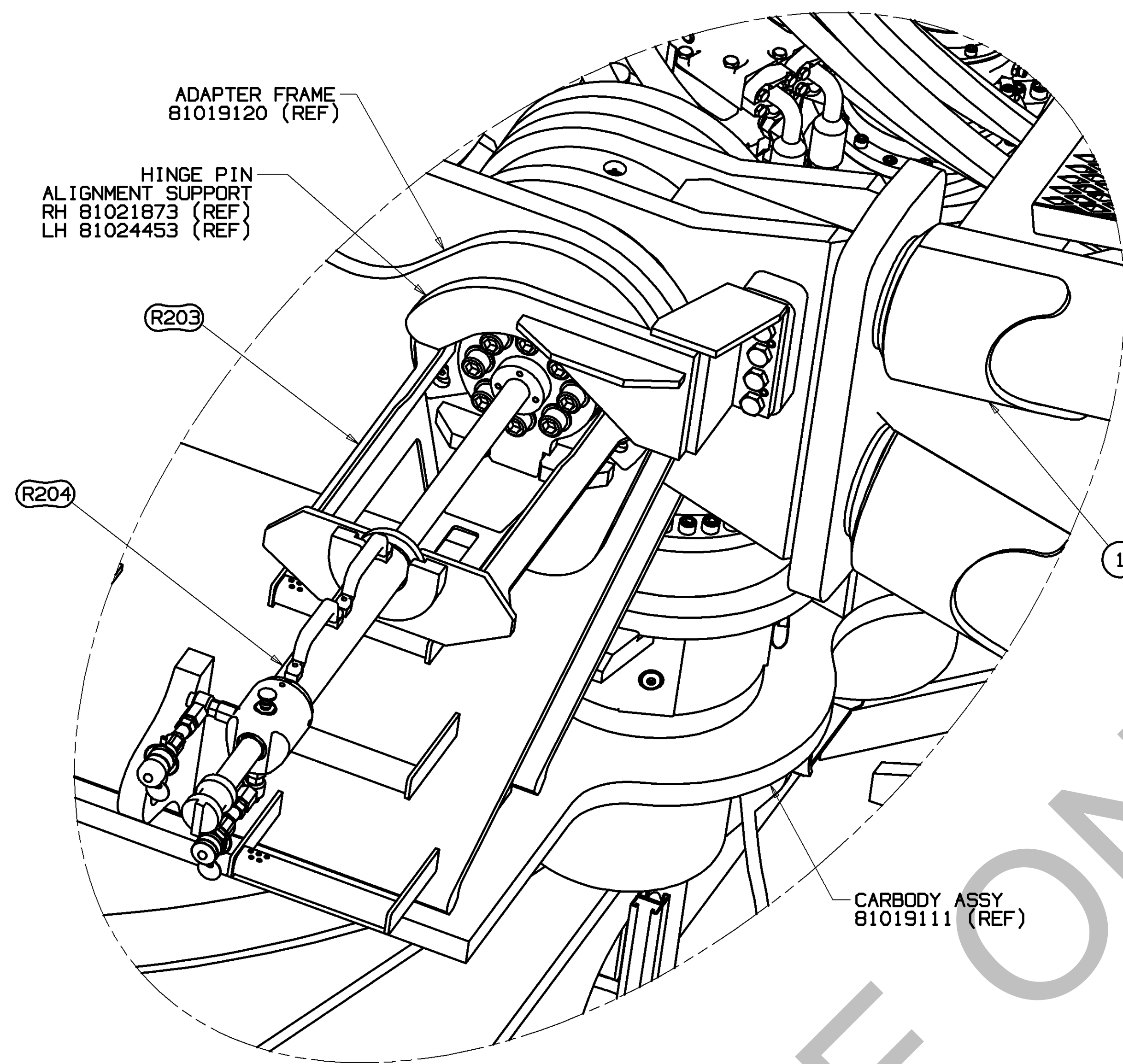
DETAIL GG
ITEM R300
DEAD END W/SWIVEL
SCALE 0.100



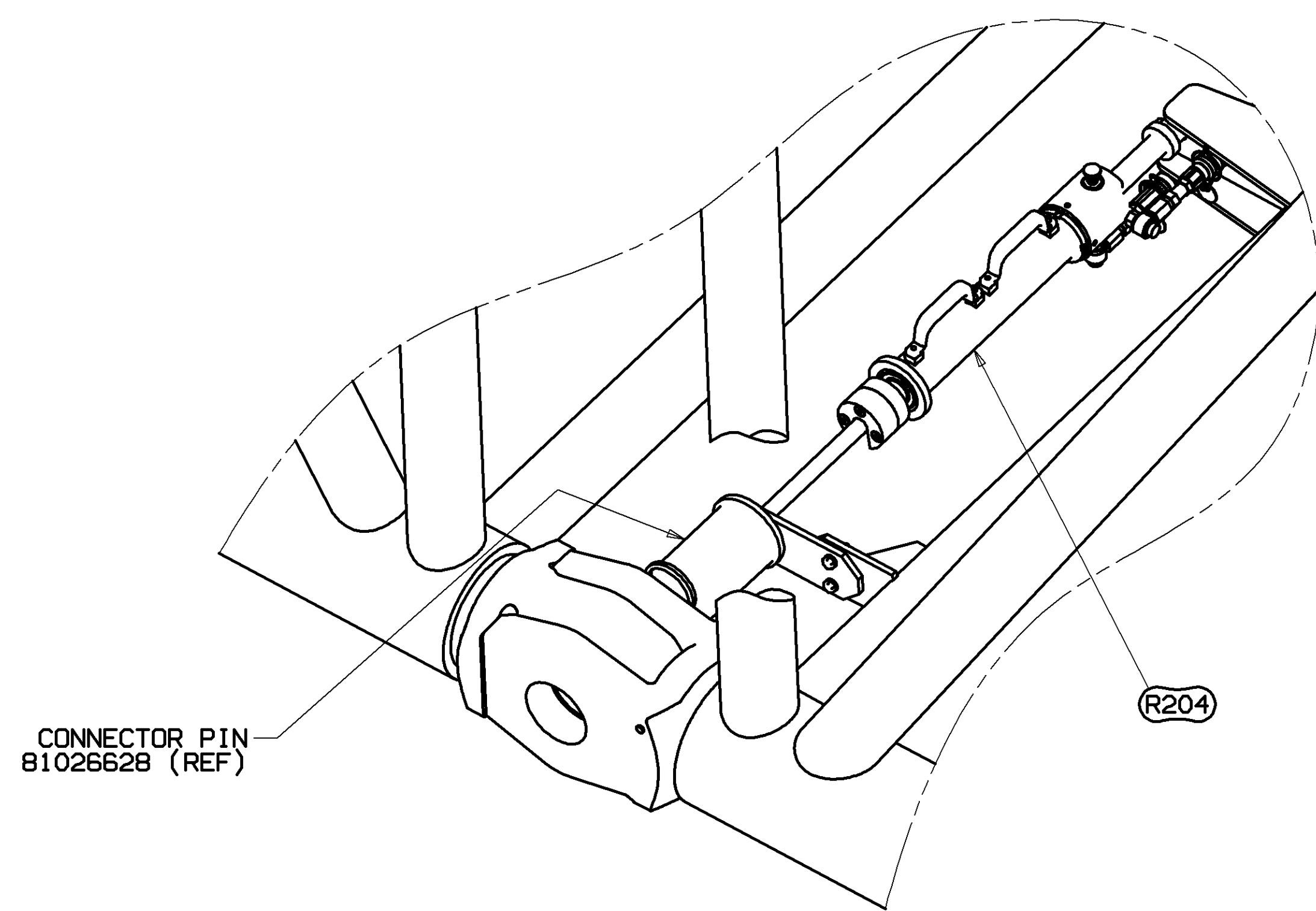
DETAIL EE
ITEM R28
DEAD END W/SWIVEL
SCALE 0.100



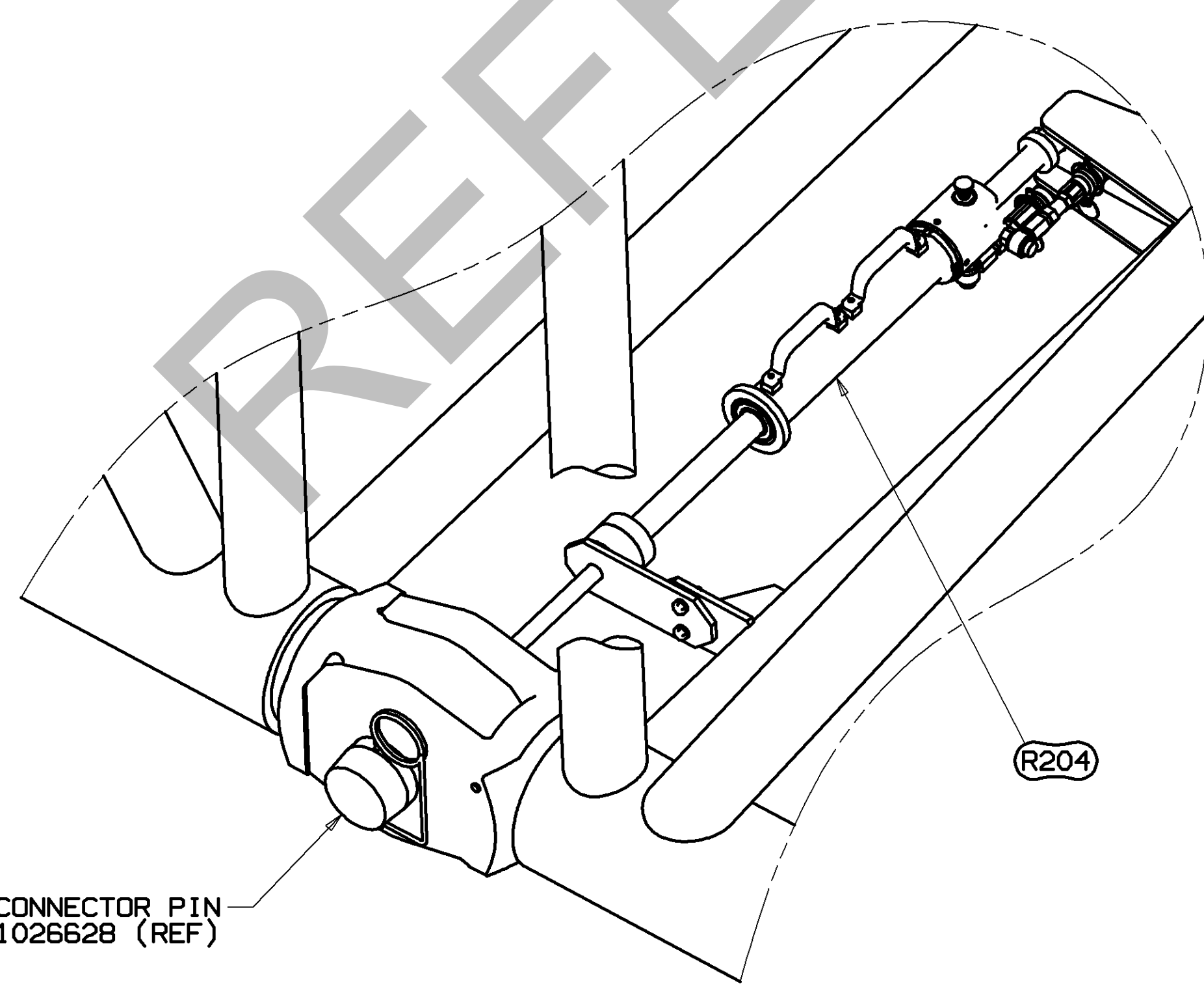
DETAIL W
BOOM HINGE INSTALLATION
PIN PULLER (R204) RETRACTED
(FROM SHEET 7)
SCALE 0.200



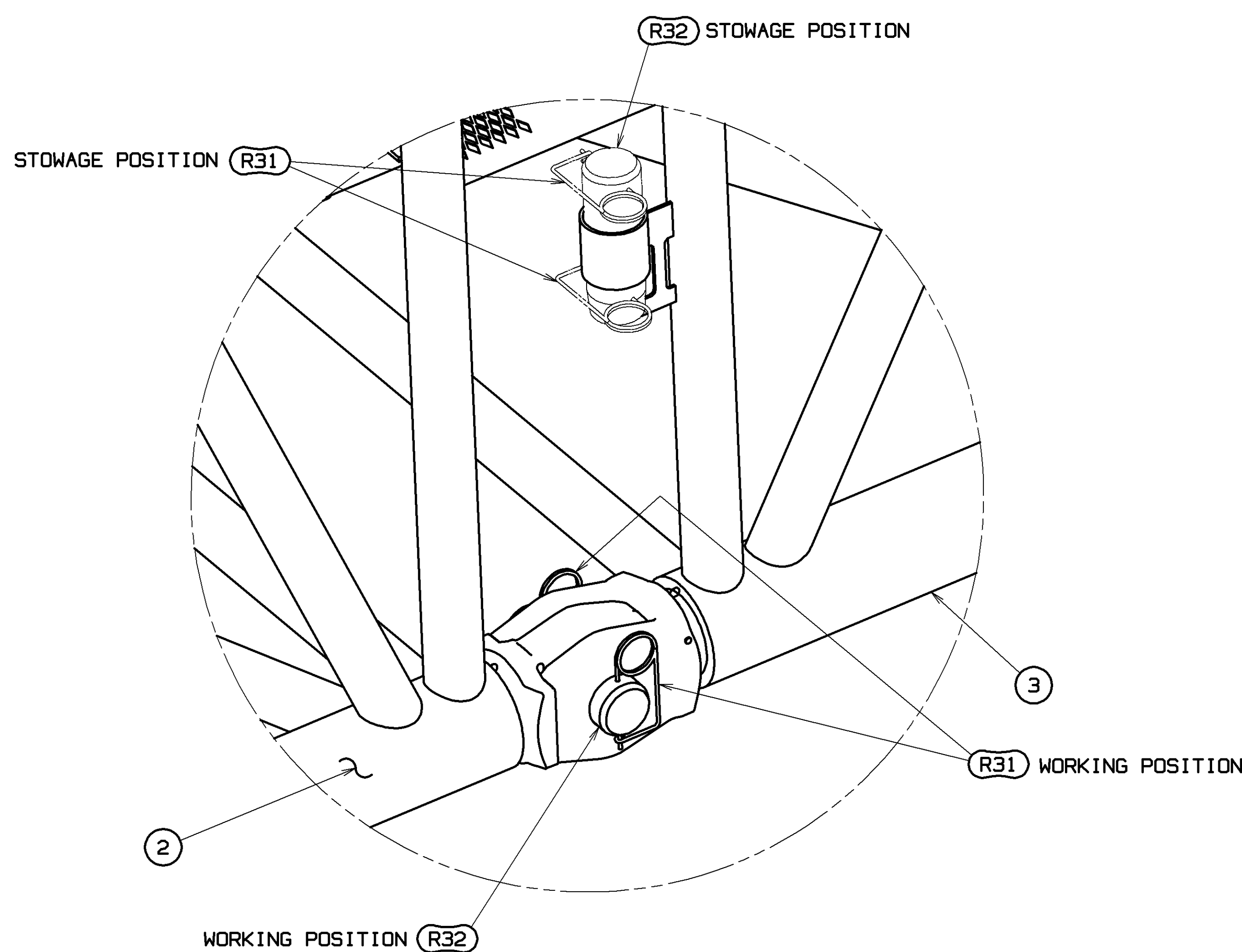
DETAIL W
BOOM HINGE INSTALLATION
PIN PULLER (R204) EXTENDED
(FROM SHEET 7)
SCALE 0.200



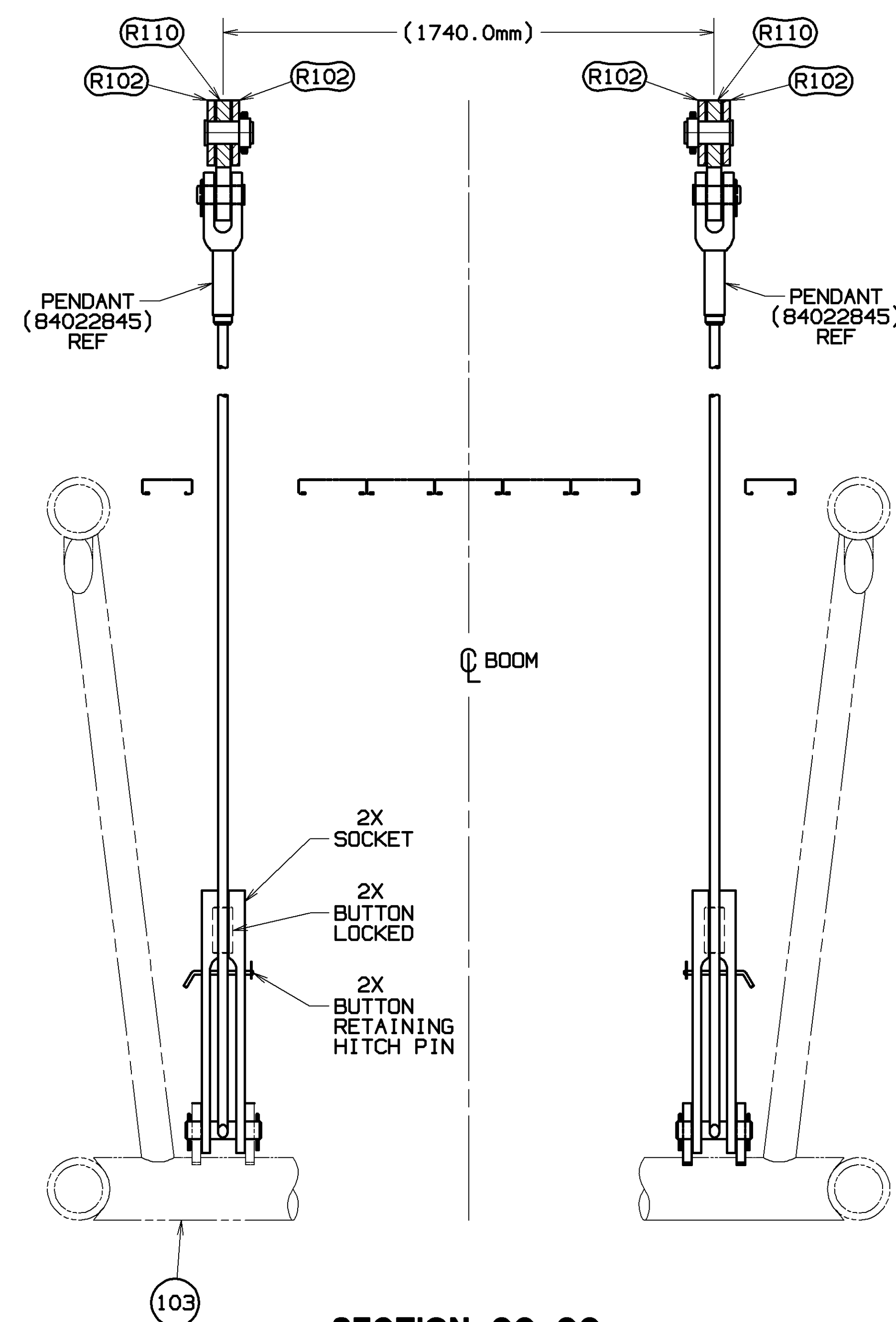
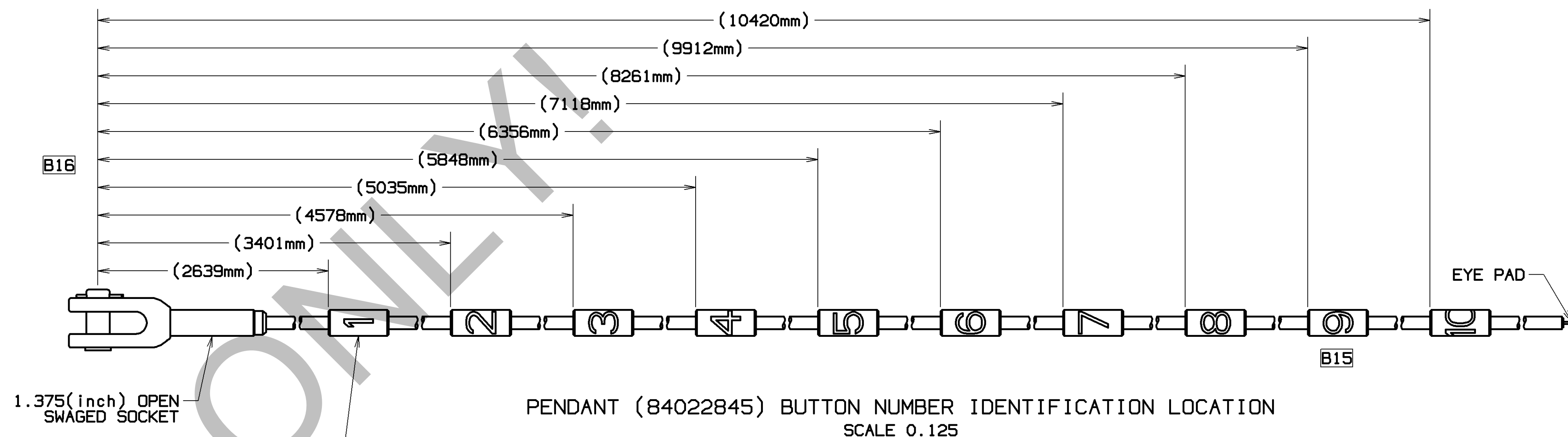
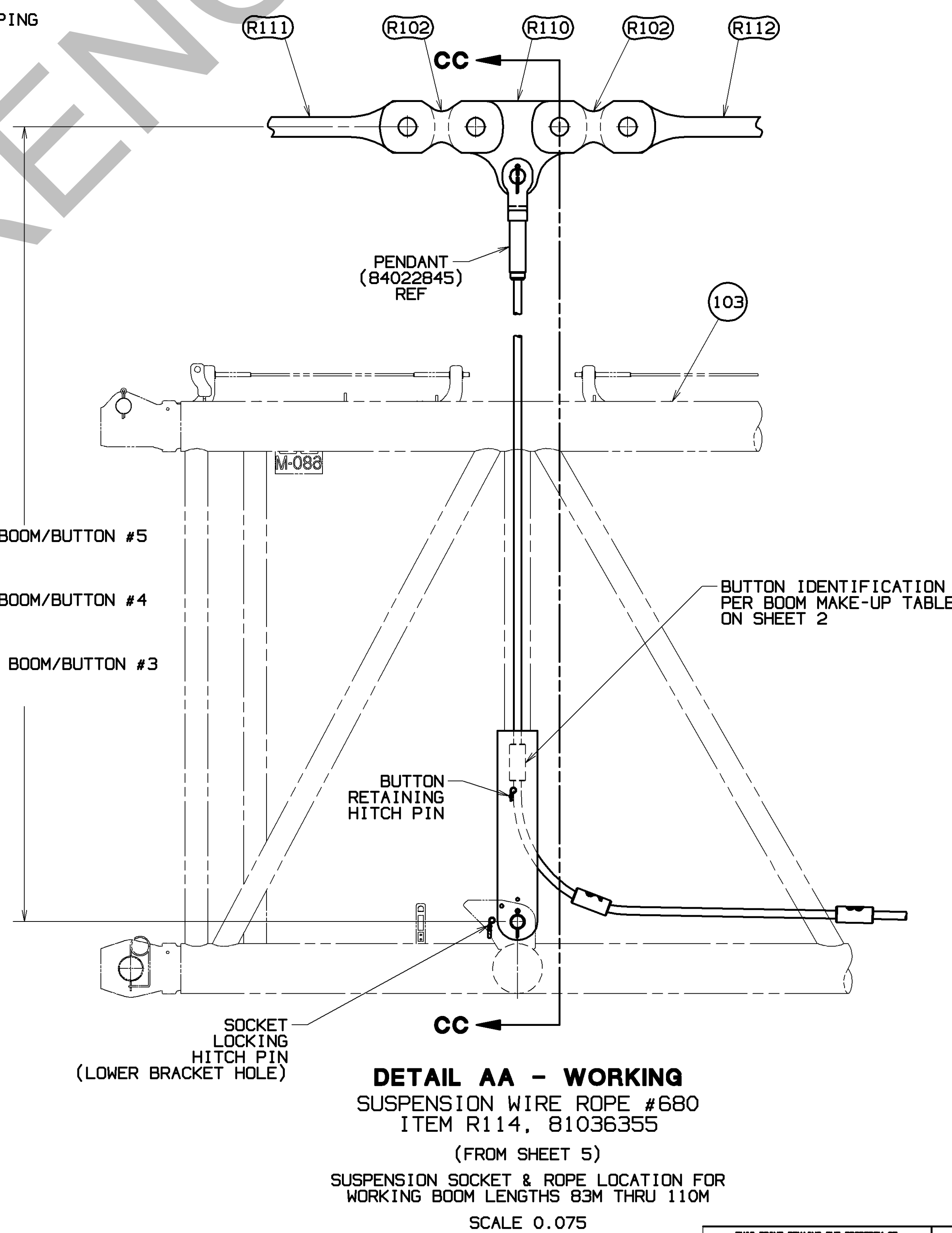
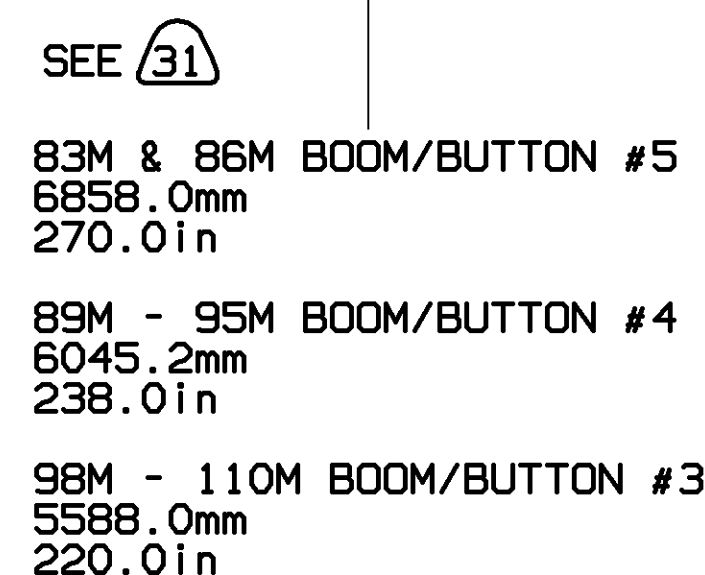
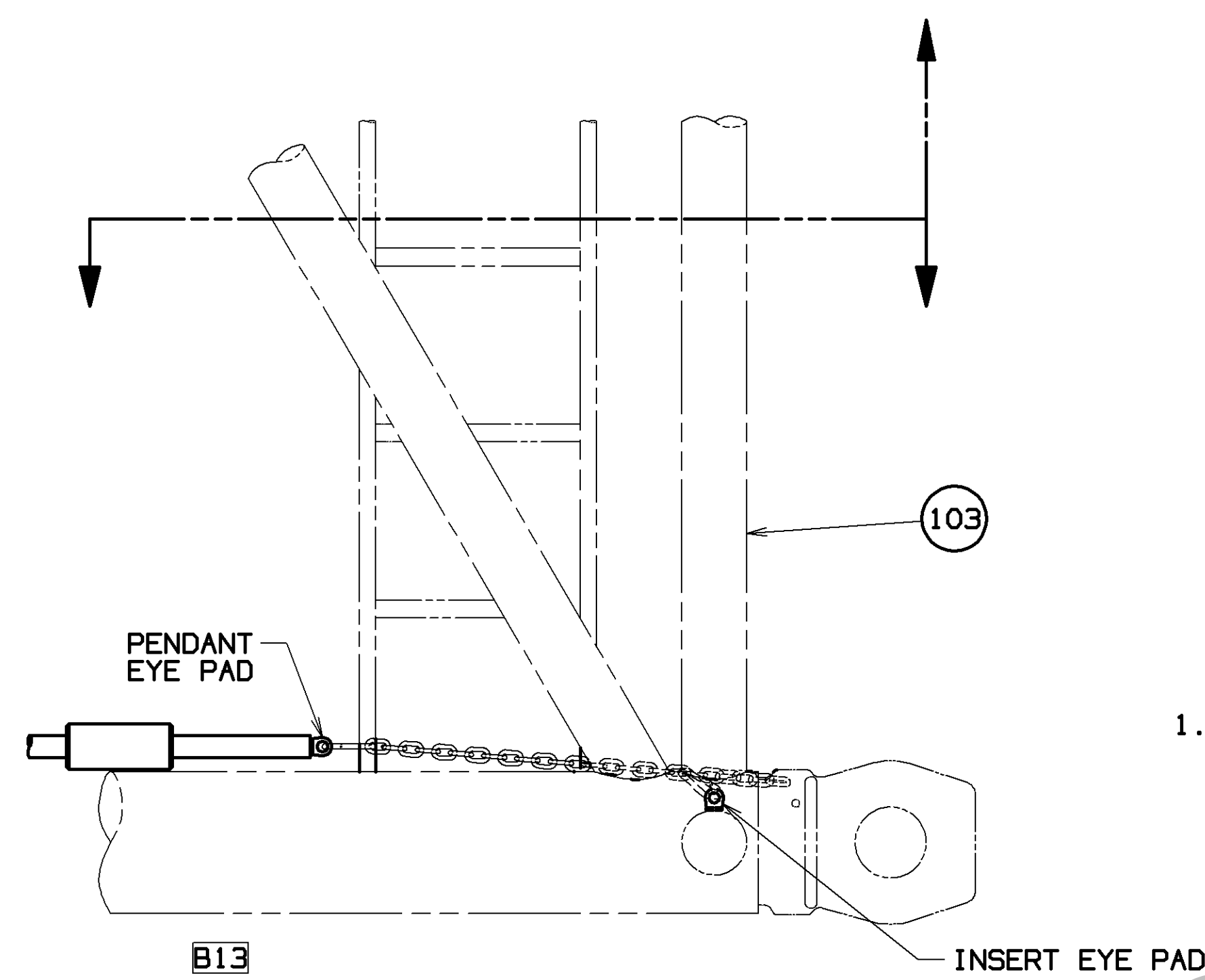
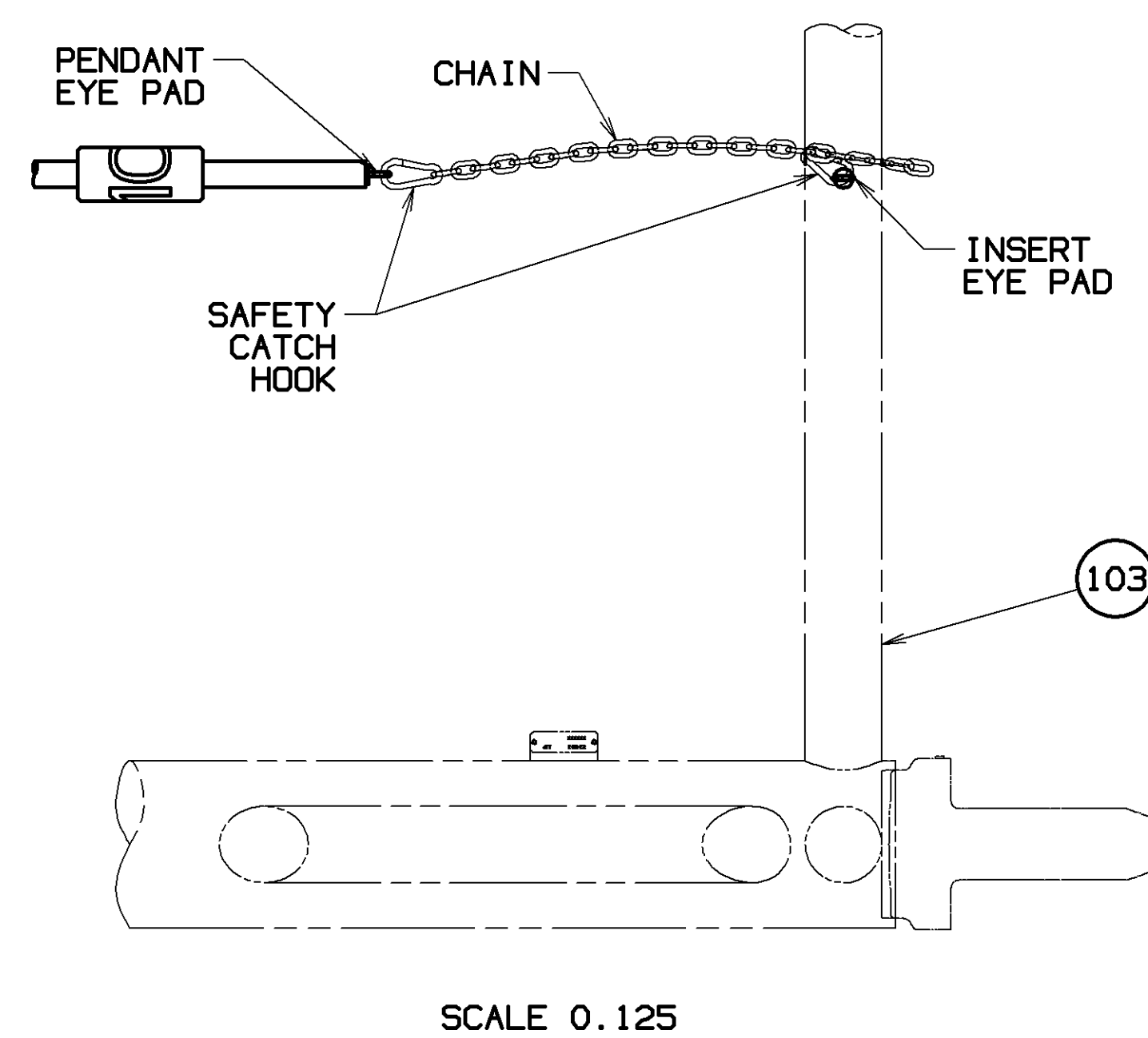
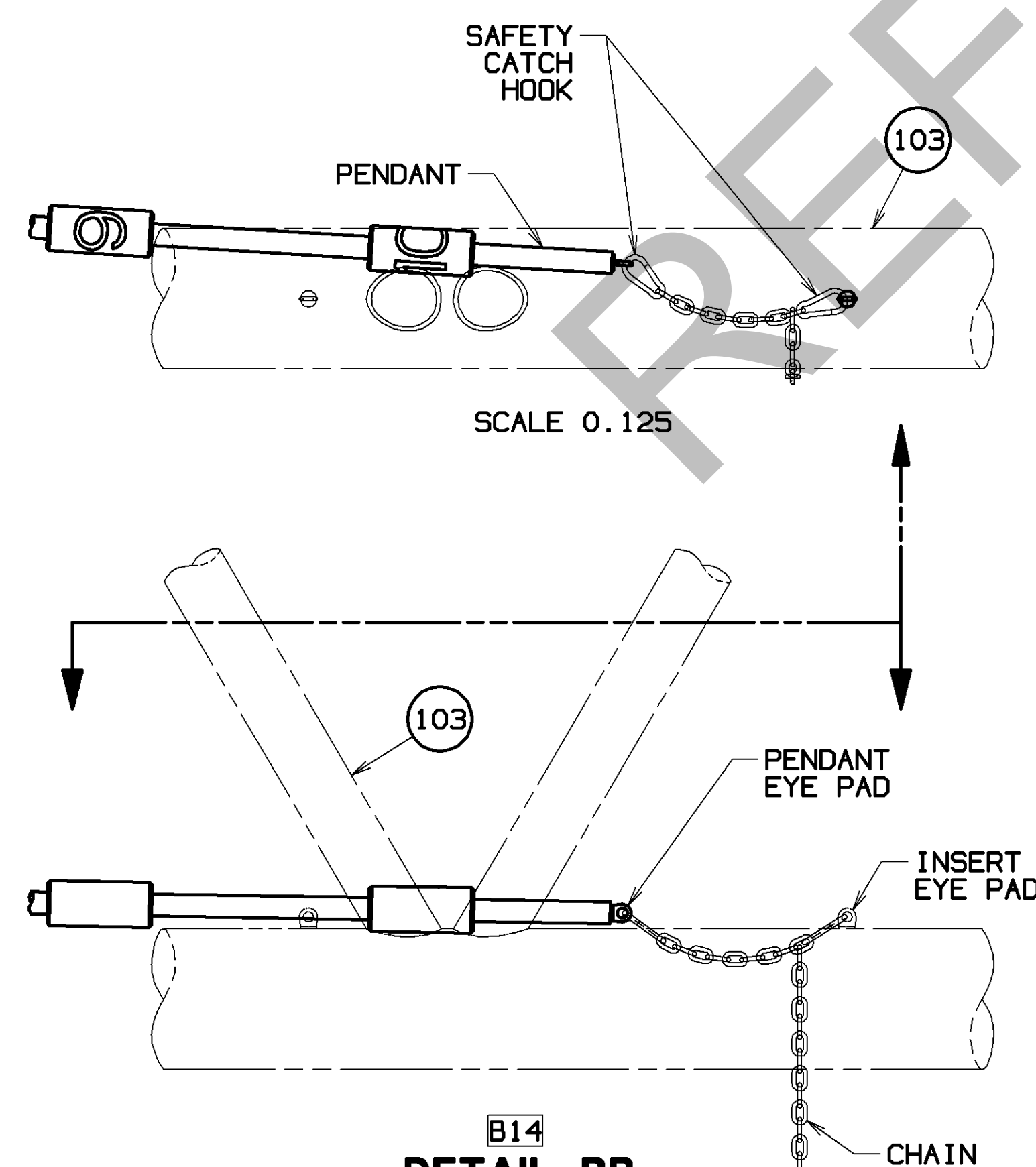
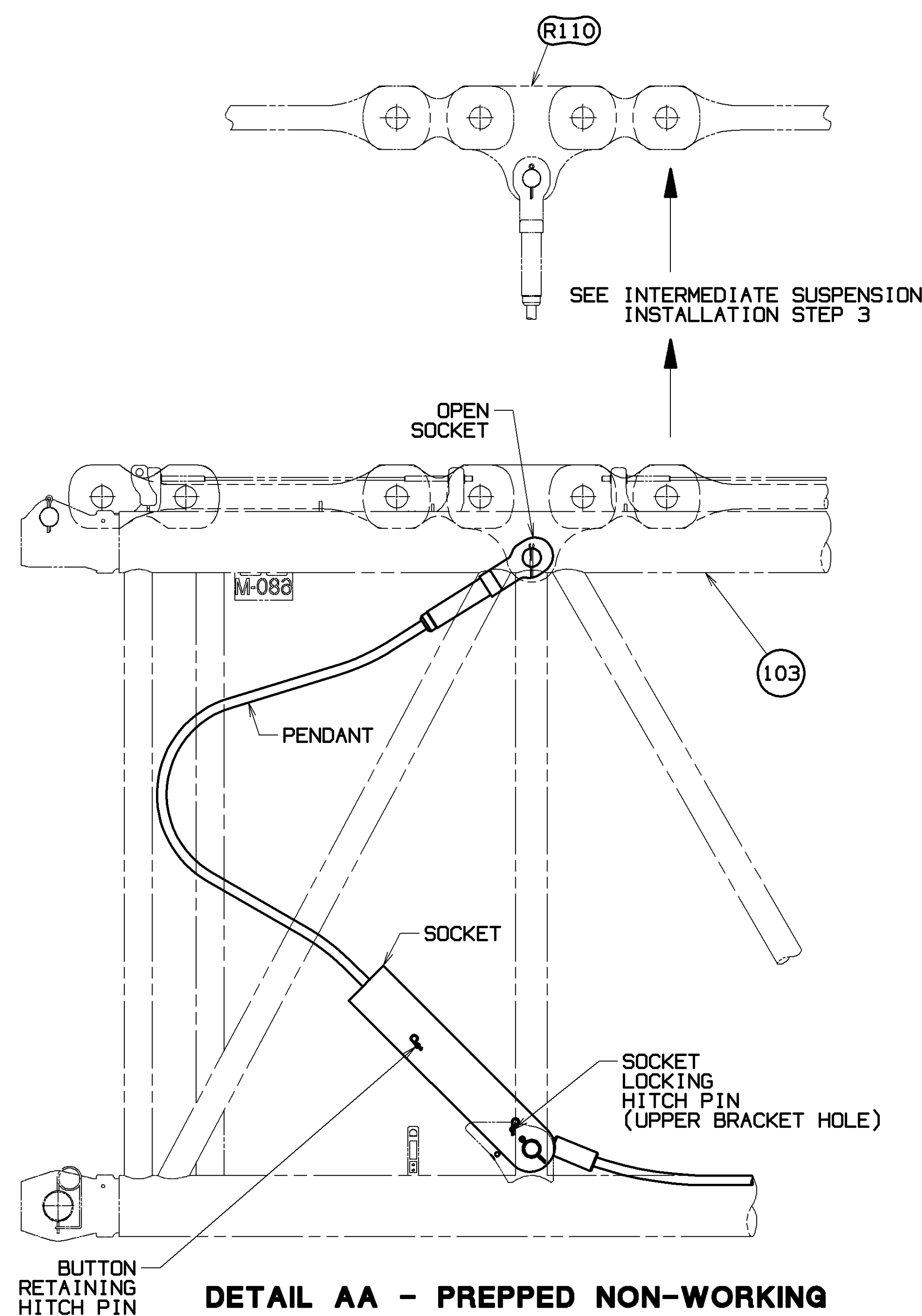
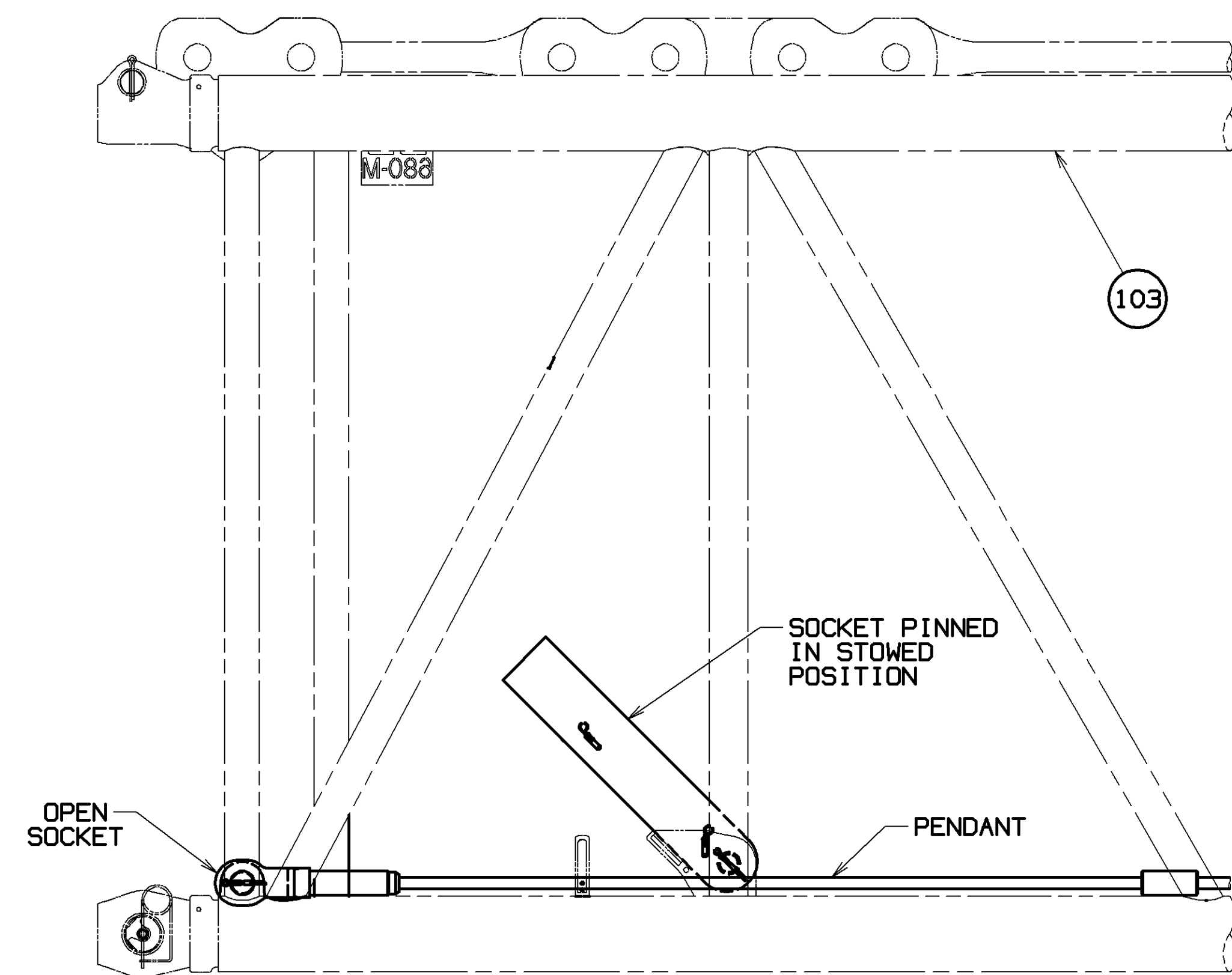
DETAIL X
TYPICAL LOWER BOOM
CONNECTOR PIN INSTALLATION
PIN PULLER (R204) RETRACTED
SCALE 0.150
SEE 32



DETAIL X
TYPICAL LOWER BOOM
CONNECTOR PIN INSTALLATION
PIN PULLER (R204) EXTENDED
SCALE 0.150
SEE 32



DETAIL HH
4M TO 12M INSERT LOWER BOOM CONNECTOR
MANUAL PIN INSTALLATION
(FROM SHEET 7)
SCALE 0.150
SEE 32



BILL OF MATERIAL						
ITEM NO. NO. REQD.	SEC- TION	DESCRIPTION	LENGTH IN.	MATERIAL	CODE NO. OR Dwg. NO	

ASSEMBLIES USED ON	
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	REVISIONS

DWG. NO.
81022863
SHT 11 OF 11

PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
6829103794 FOR
COMPONENTS LISTED
IN GDS500-05-035

DATE	03-24-15
REV.	1 TR.

C

DWG. NO.
81022863